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Delivered via Email

Secretariat of the
Committee on Payment and Settlement Systems
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Secretariat of the
Technical Committee of the International Organization of Securities Commissions
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Re: Comments of The Options Clearing Corporation on "Principles for Financial Market Infrastructures" Consultative Report (March 2011)

Ladies and Gentlemen:

This letter is submitted by The Options Clearing Corporation ("OCC") in response to the publication by the Committee on Payment and Settlement Systems of the Bank for International Settlements and the Technical Committee of the International Organization of Securities Commissions ("CPSS-IOSCO") of a consultative report entitled "Principles for Financial Market Infrastructures" in March 2011 (the "Report").[1] CPSS-IOSCO is proposing, among other things, standards for central counterparties ("CCPs")[2] that would replace CPSS-IOSCO's current Recommendations for Central Counterparties, which was published in November 2004 (the "2004 RCCP"). The cover note to the consultative report indicates that CPSS-IOSCO is particularly interested in comments on Principles 4 (credit risk), 7 (liquidity risk), 14 (segregation and portability), 15 (general business risk), 18 (access and participation requirements), 19 (tiered participation requirements), and (20) FMI links. We have provided comments on most of these core issues, as well as certain other Principles. Our comments primarily focus on areas in which we believe the Report could be improved to account for OCC's unique structure. We welcome this opportunity to comment on the Report and look forward to an ongoing dialogue with CPSS-IOSCO and our own national regulators concerning the issues raised in the Report and the most appropriate way to implement the extensive reforms called for by the Report, while minimizing market disruption.

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1 The report is available at http://www.bis.org/publ/cpss94.htm.

2 In this letter, we will use the term "CCP" in lieu of the term "FMI" or "financial market infrastructure" as our specific interest is in the application of the Report to CCPs.

OCC Background

Founded in 1973, OCC is currently the world's largest clearing organization for financial derivatives. OCC has historically been the only clearing organization in the United States registered with the U.S. Securities and Exchange Commission (the "SEC") as a securities clearing agency pursuant to Section 17A of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and with the U.S. Commodity Futures Trading Commission (the "CFTC") as a derivatives clearing organization ("DCO") pursuant to Section 5b of the U.S. Commodity Exchange Act, as amended (the "CEA").[3] OCC clears securities options, security futures and other securities contracts subject to the SEC's jurisdiction, and commodity futures and commodity options subject to the CFTC's jurisdiction. OCC clears derivatives for all nine U.S. securities options exchanges and five U.S. futures exchanges.[4] OCC also expects to clear certain over-the-counter options ("OTC Options") in the near future, and may also clear security-based swaps.

General Comments

We thank CPSS-IOSCO for putting forward a thoughtful and detailed Report in an effort to modernize international standards for CCPs to reflect the lessons learned during the recent financial crisis. We recognize the substantial effort that went into preparing such a detailed and high-quality report, and the difficulty faced by the drafters in proposing global standards in this area. In many respects, the Report reflects standards that OCC already meets, and we believe certain of the other proposed standards are reasonable standards for all CCPs. However, there are certain instances in which the Report may be improved by adding flexibility for CCPs in implementing international standards.

The Report is, in many respects, less flexible than the 2004 RCCP,[5] which we believe has served market participants well for the past seven years. CCPs have historically been given broad discretion to determine their own policies and procedures in a manner appropriate to their particular business models and the markets they clear. While imposing fixed requirements on CCPs may result in a certain amount of uniformity, it may not, in all cases, serve the goal of high-quality CCP risk management, which we believe is best served through encouraging CCP innovation and creativity within broadly outlined risk management principles. Standards that lack sufficient flexibility may stultify innovation and force CCPs to expend valuable resources on formal checklist items that have little connection to actual risk management in their specific circumstances. Inflexible standards may actually increase systemic risk by limiting the ability of

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3 Pursuant to provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank), several other clearing organizations automatically became dually-registered as both clearing agencies and DCOs, effective as of July 16, 2011.

4 The participating options exchanges are BATS Exchange, Inc., C2 Options Exchange, Inc., Chicago Board Options Exchange, Inc., International Securities Exchange, LLC, NASDAQ OMX BX, Inc., NASDAQ OMX PHLX, Inc., NASDAQ Options Market, NYSE Amex LLC and NYSE Arca, Inc. OCC clears futures products traded on CBOE Futures Exchange, LLC, ELX Futures, LP, NASDAQ OMX Futures Exchange and NYSE Liffe US, as well as security futures contracts traded on OneChicago Exchange and options on futures contracts traded on NYSE Liffe US.

5 Among the areas in which we believe the Report imposes standards that are highly prescriptive are governance, margin requirements, credit risk, liquidity risk, and general business risk.

CCPs to focus effectively on the most important risks presented by the particular clearing activities, margin systems, collateral arrangements, membership characteristics, and other factors that may vary substantially among CCPs. We encourage the drafters to consider the importance of flexibility when preparing their final work product.

We also believe that the significant costs of complying with the proposed requirements should be weighed against the potential benefits of such requirements. We believe that the Report in many cases does not reflect a sufficient consideration of relative costs and benefits or strike the proper balance between the two. CCPs have a history of strong performance, including through periods of severe market upheaval such as the 2008 global economic crisis, the terrorist attacks of 2001, the events surrounding the failure of Long-Term Capital Management in 1996, and the 1987 "Black Friday" market crash. This performance was achieved without many of the detailed requirements proposed in the Report.

The following specific comments are generally presented in the order in which the Principles appear in the Report. This order does not necessarily reflect the order of importance or weight we place on each comment.

Principle 1: Legal Basis

"An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each aspect of its activities in all relevant jurisdictions."

We support Principle 1 and the five corresponding Key Considerations. However, we believe certain language in Explanatory Note 3.1.5 is potentially confusing as it is currently drafted. The language at issue reads: "consistent with . . . principle 14 on segregation and portability, the legal basis should protect the assets and positions of a participant's customers in a . . . CCP in order to *achieve fully* the benefits of segregation and portability."[6] However, as Principle 14 expressly recognizes that portability may not be legally possible or economically practicable in all cases, we believe the cited language of Explanatory Note 3.1.5 should be revised to read "to achieve **as** fully **as practicable** the benefits of segregation and portability **given the constraints identified in principle 14**."[7] This change will account for the fact that the extent to which a full segregation and portability regime is possible will be dictated in part by legal and regulatory constraints that will be beyond any individual CCP's control. Achieving full segregation and portability is a laudable aspiration, but practical and legal obstacles make "full" segregation and portability very difficult to achieve in many situations. In addition, as described more fully below, full segregation and portability may come at a substantial cost to customers, who may ultimately determine that the benefits of full segregation and portability are not worth the costs.

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6 Report, p. 20 (emphasis added).

7 In this letter we will indicate recommended deletions with ~~strike-through text~~ and additions with **bold-underline text**.

Principle 2: Governance

"An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders."

Board Structure/Independence

Key Consideration 4 of Principle 2 states, in part, that a CCP's "board should contain suitable members with the appropriate skills and incentives to fulfill its multiple roles. *This typically requires the inclusion of independent board member(s).*"[8] The use of the term "member(s)" clearly implies that, at least in some circumstances, a single independent board member might be sufficient. We strongly endorse this conclusion. The standard also implies that there might be circumstances where no independent director is required. While OCC values the contribution of an independent director and would not seek to eliminate the position, we applaud the flexibility reflected in the requirement as drafted. We think that the Report should make clear that, notwithstanding the valuable perspective that an independent director may bring, independence is not a measure of suitability. Indeed, it is often essential to have substantial representation on the board of directors who are *not* independent, because representation of various interested constituencies with potentially divergent interests is often essential to good governance. Directors representing various stakeholders are also frequently an essential source of expertise and specifically relevant experience, and their self-interest in the clearing services provided typically results in a high level of involvement, diligence and watchful oversight of management that redounds to the benefit of the clearinghouse. These benefits may be diluted when a board is forced to take on a large number of independent directors. We also commend the language in Explanatory Note 3.2.4, which states that "[t]here is no single set of governance arrangements that is appropriate for all FMIs and all market jurisdictions" and that "[a]rrangements may differ significantly because of national law, ownership structure, or organisational form."[9] It might also be added that the number and types of clearing members, equity owners, and markets whose transactions are served by a CCP may differ substantially from one CCP to another and those differences may dictate different governance structures.

OCC has a unique governance structure due to its role as a non-profit market utility. OCC is owned equally by five options exchanges[10] and currently has approximately 120 clearing members. OCC's Board of Directors has 16 members consisting of nine clearing member directors ("Member Directors"), five directors nominated by the stockholder exchanges ("Exchange Directors "), one director who is not affiliated with any national securities exchange, national securities association, or broker or dealer in securities (the "Public Director") and the Chairman of OCC (the "Management Director"). While the Member Directors control the Board (with 9 of 16 seats), OCC rules require that Member Directors be representative of OCC's overall membership, which includes large and small firms, thus assuring that the largest firms (including those that are the largest dealers in OTC derivatives) do not control the Board.

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8 Report, p. 23 (emphasis added).

9 Report, p. 24.

10 Two of OCC's stockholder exchanges are under common ownership.

Organic transactions such as mergers and certain rule changes require unanimous stockholder approval, which operates as a check on the Board's discretion.

OCC's current directors are ineligible to serve on OCC's nominating committee, which nominates both Member Directors and members of the next year's nominating committee, and no person associated with the same firm as a member of the nominating committee may be nominated as a Member Director or a member of the next year's nominating committee.

OCC's Membership/Risk Committee is composed of the Management Director, the Public Director, and five Member Directors. This committee manages the risk of the clearinghouse, including making decisions on clearing membership. All clearing members must meet certain financial responsibility requirements, operational capability, experience and competence. Each clearing member must have an initial net capital of $2,500,000 prior to being admitted, and in order to have contracts cleared, members must maintain a minimum of $2,000,000 net capital, with increasing margin requirements for positions not adequately supported by capital. The committee's composition guarantees that the directors making critical risk management decisions have the required expertise to do so as well as a financial stake in the decisions made. The high quality of OCC's risk management is reflected in the fact that OCC was the first clearing organization to receive a AAA credit rating from Standard and Poor's, which recently noted that OCC's financial safeguards functioned particularly well during the extreme market volatility of 2008 and 2009.[11]

OCC's carefully designed governance structure has enabled OCC to operate as a market utility, providing low cost clearing services to its members, while maintaining open access to members that meet OCC's membership requirements but ensuring that margin levels are set at appropriate levels to manage risk in a cost-effective manner. We do not interpret the Report as requiring OCC to change its present governance structure. We believe that the long-term preservation and success of OCC's status as a non-profit market utility depends on maintaining the appropriate balance among OCC's various constituencies. OCC's governance structure was carefully constructed with the active participation of the SEC. It results in a balanced representation of the competing interests of large and small clearing members and different business models, as well as representation of the stockholder exchanges (which compete with each other). While OCC values the contribution of its Public Director, OCC is concerned that requiring a significant increase in the number of Public Directors would result in a diminished voice for the various clearing member and stockholder exchange constituencies and would disrupt the present delicate balance of interests on OCC's board. In this context, we also note the language in Explanatory Note 3.2.8, which could be read to imply that merely including a sufficient number of non-executive board members may not be sufficient to meet the requirements of Principle 2.[12] We believe that this Explanatory Note should be modified to address only the need to limit the number of executive board members and not to address the distinctly separate question of director independence in a broader sense.

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11 Standard and Poor's, *Full Analysis, Options Clearing Corporation* (March 12, 2010).

12 Report, p. 25.

Model Validation

The Report indicates that a CCP should validate its risk models on an ongoing basis. The validation process should be "independent of the development, implementation, and operation of the models and their methodologies, and the validation process should be subjected to an independent review of its adequacy and effectiveness."[13] While we support the quoted language, we believe the drafters should clarify that an employee of a CCP may be sufficiently independent to perform model validation for the CCP. We acknowledge that there may be circumstances in which it would be appropriate for a CCP to obtain outside validation of its risk models. For example, in cases involving wholesale replacement of existing methodologies, or the modeling of risks new to the CCP in which CCP staff have limited existing expertise, an external review can provide a helpful and, of course, independent perspective. In other cases, however, OCC believes that review by qualified internal personnel is both appropriate and often more efficient, provided that the culture and processes are in place to ensure that models are subject to effective challenge and appropriate steps are taken to ensure objectivity. Such steps include ensuring that the reviewers are not the same individuals as those involved in designing such models and that they are otherwise unbiased.[14] In some circumstances, it may be difficult for a CCP to locate outside consultants who can perform in-depth model validations efficiently. In those situations, forcing the CCP to externalize this function may result in a less, rather than more, effective validation process.

Indeed, the most effective approach to model quality assurance is the development of a culture in which model quality assurance is prized, and locating a problem within a model – or finding a way to improve one, especially one that those in senior positions have not thought of – is career-enhancing. OCC believes that it has such a culture. Moreover, OCC's policies and procedures for model review ensure a transparent, auditable process that should avoid the risks the drafters appear to be concerned about. We note that, in the recently released Supervisory Guidance on Model Risk Management, the Board of Governors of the Federal Reserve System and the Office of the Comptroller of the Currency stated that "corporate culture plays a role [in providing appropriate incentives for proper model review] if it establishes support for objective thinking and encourages questioning and challenging of decisions."[15] The foregoing guidance also states that "independence *may* be supported by separation of reporting lines, [but] it should

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13 Report, Explanatory Note 3.2.13, page 13.

14 The U.S. Office of the Comptroller of the Currency, the U.S. Department of the Treasury, the U.S. Federal Reserve System and the U.S. Federal Deposit Insurance Corporation recently proposed revisions to their risk-based capital guidelines. These proposed revisions would require banks to validate their internal risk models initially and on an ongoing basis and would require that this "validation process . . . be independent of the internal models' development, implementation, and operation, or [that] the validation process . . . be subjected to an independent review of its adequacy and effectiveness." However, the proposed capital guidelines state that "[t]he review personnel [would] not necessarily have to be external to the bank in order to achieve the required independence. A bank should ensure that individuals who perform the review are not biased in their assessment due to their involvement in the development, implementation, or operation of the models." Risk-Based Capital Guidelines; Market Risk, 76 FR 1890 (January 11, 2011), at 1897.

15 Supervisory Guidance on Model Risk Management, Board of Governors of the Federal Reserve System and the Office of Comptroller of the Currency, April 4, 2011, at p. 9.

be judged by actions and outcomes, since *there may be additional ways* to ensure objectivity and prevent bias."[16]

We strongly support these comments, and we believe that Explanatory Note 3.2.13 should be made consistent with them by clarifying that CCPs should have broad discretion as to how to meet the review requirements, so long as the goal of subjecting models to effective challenge is observably achieved.

In addition, Explanatory Note 3.6.8 under Principle 6 (Margin) states, in relevant part, that "any material revisions or adjustments [to a CCP's margin methodology] should be . . . validated by a qualified and independent party prior to implementation."[17] Changes in a CCP's margin model are often made with the goal of decreasing the risk exposure of the CCP, and in certain instances a CCP may seek to put these changes in place in a very short timeframe in response to market events. Requiring validation before implementing such changes could expose the CCP and the markets to undue risk.

Principle 4: Credit Risk

"An FMI should effectively measure, monitor, and manage its credit risk from participants and from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. A CCP should also maintain additional financial resources to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the [one/two] participant[s] and [its/their] affiliates that would potentially cause the largest aggregate credit exposure[s] in extreme but plausible market conditions."

Cover 1 Versus Cover 2 (Credit)

OCC supports a Cover 1 standard for both credit and liquidity purposes (Cover 1 versus Cover 2 for liquidity purposes is discussed below). Cover 1 is the currently accepted CPSS-ISOCO standard and it has served the markets well throughout the course of the recent financial crisis. We see no need to change the standard at this time. We also believe that the drafters should expand their analysis beyond the issue of Cover 1 versus Cover 2 to include the assumptions used in determining the financial resources required to meet either a Cover 1 or Cover 2 scenario. In particular, the drafters should consider CCP assumptions about the level of market volatility that would exist at the time of the single default or simultaneous defaults, and the nature of the participants whose defaults would be required to be covered. These assumptions, which we discuss below, may be of equal or greater importance than whether a Cover 1 or Cover 2 standard is adopted. We also note that a Cover 2 standard could (depending on the setting of the various stress test assumptions) place a severe burden on CCPs in which the two largest clearing members account for a very substantial percentage of clearing activity.

The Report should account for the types of clearing members whose defaults must be covered by a CCP. For example, although OCC's two largest participants (in terms of risk

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16 *Id.* (emphasis added).

17 Report, p. 43.

exposure) change from time to time, they are always among the largest and most well-capitalized global firms. Although the recent financial crisis showed that large firms can and do fail, the simultaneous failure of the two largest firms participating in a given CCP is highly implausible. Extensive regulatory reforms are being implemented with the goal of making it even less likely that large and systemically important financial firms will fail. These reforms include requiring such firms to hold substantially more capital than non-systemically important firms, requiring them to implement more robust operational risk controls, and subjecting them to new orderly liquidation regimes. The drafters should consider these other reforms when determining whether to impose a Cover 1 or Cover 2 requirement, as these other reforms make defaults by systemically important members materially less likely (particularly simultaneously with other defaults by systemically important members).

Note that even the CFTC, which itself proposed a Cover 2 standard for systemically important DCOs,[18] stated that "no U.S. futures clearinghouse has ever had more than one clearing member default at a time." The same is also true of U.S. securities clearing agencies. These statements remained true during periods of severe market volatility (*e.g.*, 1987, 1996, 2001, 2008). If heightened risk management standards are imposed on a CCP in such a way as to substantially increase the costs for clearing members and their customers, there is risk of undermining the goals of recent regulatory reforms.

OCC's two largest clearing members represent a substantial percentage of the market for cleared equity options in the United States. This is a feature of the markets we clear that has developed over time and is something over which we have no control. Imposing a Cover 2 standard on OCC could represent a substantially more burdensome requirement than imposing such a requirement on a CCP with a less concentrated membership. A Cover 2 standard could also make clearing equity options unduly costly and curtail risk-mitigating trading in the markets cleared by OCC. While there is no other choice for clearing U.S. listed equity options, there are other instruments (including OTC products) that may substitute for such options, and business may shift to the markets for those other instruments if OCC is forced to hold financial resources that make trading listed options cleared by OCC more expensive than trading those other instruments.

We also note that our current stress testing methodology may be as conservative as a Cover 2 standard with appropriate volatility assumptions. The stress test we apply to the possible failure of our single largest clearing member incorporates a very conservative assumption that volatility could be low prior to default (*i.e.*, a "bolt out of the blue" or surprise event among calm markets) but that volatility would increase very significantly immediately after the default. By contrast, our model for simultaneous defaults assumes that there would be heightened volatility at the time of the dual defaults. The significance of elevated volatility prior to a dual default is that our margin models take account of market volatility and increase margin requirements accordingly, reducing the need for non-margin resources in the event of a default.

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[18] Commodity Futures Trading Commission, Financial Resource Requirements for Derivatives Clearing Organizations, 75 Federal Register 63113, at 63116 (October 14, 2010).

Stress Testing (Credit)

Key Consideration 5 would require comprehensive stress tests, involving a "full validation" of models, parameters, and assumptions, on an annual or more frequent basis.[19] We are uncertain as to what is meant by conducting a "full validation" of our models, etc. While we engage in an annual evaluation to confirm the performance and appropriateness of our financial resource methodology with the involvement of the Board's Risk Committee, we do not reevaluate every aspect of the model on an annual basis. Doing so would be extremely costly and time consuming and, we believe, would be a waste of scarce resources. We ask that the drafters reconsider the use of the words "full validation" in the Report to avoid any unintended implications.

Reverse Stress Tests (Credit)

Key Consideration 6 of Principle 4 would require a CCP to include "reverse stress tests" as part of its testing program in order to identify "extreme market conditions for which the CCP's financial resources would be insufficient."[20] While we believe that reverse stress tests can be a valuable tool for CCPs to assess their own financial resources, and that a CCPs regulator should have access to the results of these reverse stress tests in order to properly supervise the CCP, we caution the drafters against adopting any requirement that would make the results of reverse stress tests publicly available. By focusing on dramatic, although highly remote, scenarios, reverse stress tests can unduly undermine confidence in the markets. Because public disclosure of the results of reverse stress tests can be so misleading and potentially incendiary, any disclosure requirement may chill the use of such tests by CCPs and undermine their value.

Replenishing Resources (Credit)

Key Consideration 7 would require a CCP's rules and procedures to "indicate its process to replenish any financial resources it may employ during a stress event, including the potential default of the *two* participants and their affiliates that would cause the largest aggregate credit exposure so that the [CCP] can continue to operate in a safe and sound manner."[21] We are confused by Key Consideration 7, as it implies that a CCP must follow a Cover 2 methodology with respect to financial resources, notwithstanding that the Report has left the Cover 1 versus Cover 2 issue open for comment. If the drafters intend that under a Cover 1 standard a CCP nevertheless must have sufficient resources (including, for this purpose, CCP member assessments) to meet a Cover 2 standard, then we ask that the drafters clarify this in their final work product.

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19 Report, p. 31.

20 *Id.*

21 Report, p. 31 (emphasis added).

Principles 5 and 6: Collateral and Margin

Collateral

"An FMI that requires collateral to manage its or its participants' credit risk should accept collateral with low credit, liquidity, and market risk. An FMI should also set and enforce appropriately conservative haircuts and concentration limits."

Margin

"A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed."

We are addressing Principles 5 and 6 together because we view collateral and margin as part of the same analysis. Many of our comments with respect to the Report's margin standards are engendered by what we perceive to be the inappropriateness or inapplicability of those standards to OCC's unique margin system. Whereas OCC's margin system is unique in providing for true "portfolio margining" as described in further detail below, the Report seems to assume that all CCP margin systems are similar. Some of the standards in the Report are either problematic or not meaningful as applied to OCC's system. We are concerned that, because our system does not operate in the same way as other risk management systems currently in use, it could be found not to meet certain of the requirements of the Report even though we believe our system to be a superior system for managing risk. Although in most cases we believe our system meets the standard if reasonably interpreted, we are concerned because we do not know how literally or narrowly the standard will be applied. OCC's system has withstood significant market disruptions, proving itself to be consistent with the highest possible risk standards, and it would be unfortunate if it were necessary to change the system in order to comply with technical requirements that do not account for the unique nature of our system.

OCC's System for Theoretical Analysis and Numerical Simulations ("STANS") is a proprietary margin system that was developed by OCC in house. OCC believes that STANS is "state of the art" for a CCP. It includes a net asset value ("NAV") component and a risk component. The NAV component marks all positions to market and nets long and short positions to determine the NAV of each clearing member account ("Portfolio"). The NAV component represents the cost to liquidate each Portfolio at current prices by selling the net long positions and buying in the net short positions. The risk component is an expected shortfall risk measure designed to determine the additional asset value required in any Portfolio to eliminate an unacceptable level of risk that the Portfolio would liquidate to a deficit. This risk measure is obtained from "Monte Carlo" simulations. STANS generates a set of 10,000 hypothetical market scenarios intended to provide a realistic, statistically consistent evaluation of risk at the level of each Portfolio. These simulated scenarios incorporate information extracted from the historical behavior of each individual "risk factor" as well as its relationship to the behavior of other risk factors. Scenarios are generated for over 7,000 risk factors, including a broad range of individual equity securities, exchange traded funds, stock indices, currencies, interest rates, bond prices, Treasury and Eurodollar futures prices, variances, volatilities, and several commodity products.

OCC's unique "collateral in margins" system, implemented through STANS, differs from the systems used by other clearing organizations in that it takes account of the identity of non-cash margin assets rather than merely looking to the current market value of the assets, less a fixed haircut. We believe this system is superior to others currently in use by CCPs in that it recognizes that the market value of margin collateral may be correlated (positively or negatively) with the value of other assets and liabilities in a Portfolio. OCC believes its collateral in margins program generates Portfolio risk estimates that are superior to those used by other CCPs and that it represents a true "portfolio margining" system, which has long been a regulatory aspiration in the United States and elsewhere. The program gives clearing members an incentive to post forms of margin collateral that reduce the overall exposure of OCC to that clearing member.

The Report states that a CCP "should generally limit the assets it (routinely) accepts as collateral to those with low credit, liquidity, and market risk."[22] We believe this statement misses the mark in failing to consider that a Portfolio consists both of collateral and the cleared positions supported by that collateral. We view the distinction between collateral assets and the cleared positions they support as artificial and outdated. Both positions are subject to fluctuation in value, and both may either exacerbate or ameliorate the risk of other positions in the account depending upon their correlation with the risk of those other positions. The Report's central focus should be on whether the procedures and risk management systems of a CCP are sufficient to provide a high degree of assurance that a Portfolio (including margin assets) can be liquidated without resulting in a negative liquidation value.

We are particularly concerned that some of the collateral currently accepted by OCC would no longer be permitted under a literal reading of the "low credit, liquidity, and market risk" language in the Report. For example, OCC currently accepts less-liquid stocks and long-dated Treasury securities as initial margin. While equity products carry more market risk than, for example, AAA-rated sovereign debt, there is substantial price transparency and market data available that allows for robust risk management of this asset class. OCC applies appropriate valuation to these forms of margin to reflect the volatility and other characteristics of the instruments and their contribution to the overall risk of the Portfolio. Even though XYZ stock may be less liquid than other stocks, it may have greater value than a much more liquid stock when pledged to secure a short position in XYZ call options. Rendering less-liquid stocks and long-dated Treasury securities unacceptable as margin, based solely on their market risk attributes, would prohibit a market participant from utilizing the most efficient hedge against its derivatives position. We believe that this potential diversification of and recognition of the specific characteristics of particular margin assets reduces CCPs' risk and therefore systemic risk. We urge the drafters not to impose a standard of "low credit, liquidity, and market risk," or adopt an interpretation of this standard that would reduce opportunities for diversification of collateral and use of assets that may have specific risk-reducing properties in the Portfolio.

Haircuts

Several Key Considerations and Explanatory Notes throughout the Report mention the need for a CCP to apply prudent or appropriate haircuts to margin collateral and to independently

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22 Report, p. 37.

validate the appropriateness of these haircuts on a yearly basis.[23] While we believe that STANS should be deemed to be compliant with each of these requirements, OCC believes that there is ambiguity as to exactly what would be required with respect to haircuts. STANS does not apply fixed haircuts to securities deposited as collateral. As noted above, STANS treats collateral as part of a Portfolio (*i.e.*, true portfolio margining). STANS revisits each "haircut" or valuation on a security-by-security, account-by-account, and day-by-day basis. Moreover, the adequacy of the haircuts is checked through frequent back-testing. We also note that CCPs should be allowed to have their own employees perform the independent annual validation of haircuts required in Explanatory Note 3.5.3 in the same manner and for the same reasons as described above with respect to model validation. OCC would not validate its "haircuts" *per se*, as the valuation of collateral is an intrinsic feature of STANS, but rather would seek to fulfill this requirement though its validation of STANS, including its valuation models, more generally.

Concentration Limits

Principle 5 would require a CCP to "set and enforce appropriately conservative . . . concentration limits."[24] Although certain concentration "charges" are applied under STANS, it is not clear on the face of the Principle whether it would be sufficient to impose charges rather than fixed limits on concentration. We ask the drafters to clarify the meaning of this provision or take a flexible approach in interpreting it. Provided that the margin system adequately penalizes concentration of risk, either in cleared positions or collateral, we do not believe that fixed concentration limits should be required.

Allowance of Margin Offsets

Key Consideration 5 of Principle 6 would require that margin offsets be allowed only where "the price risk of one product is significantly and reliably correlated with the price risk of the other product. A CCP should base such offsets on an economically meaningful methodology that reflects the degree of price dependence between the products."[25] OCC shares what we presume to be the concern underlying Key Consideration 5, namely that reliance solely upon statistical estimates of correlations between risk factors is to be avoided. We believe that this concern can be met in a variety of ways. In the context of a full portfolio simulation approach to risk measurement and margining, two considerations must be recognized. First, the scope for endless variety of long and short positions in multiple instruments means that biases in any single set of correlation parameters will overstate the risk of certain Portfolios but understate the risk of others.[26] Second, when, as in the case of STANS, a huge number of correlations is involved (with around 7,000 risk factors the number of correlations is approximately 25 million),

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23 Key Consideration 3.5.3, Report, p 38.

24 Report, p. 37.

25 Report, p. 40

26 To see the essence of the foregoing point, consider the simplified context of the variance of the dollar return on a portfolio consisting of positions of "X" units and "Y" units respectively of two different securities. Let the per unit dollar returns on the two securities have standard deviations "a" and "b", and bear a correlation "r". The portfolio variance is then: $X^2\ a^2 + 2\ X\ Y\ r\ a\ b + Y^2\ b^2$. The sensitivity of this variance with respect to the assumed correlation is 2 X Y a b, which can be either positive or negative, depending on whether X and Y represent positions in the same or opposing directions.

reliance on purely statistical estimates as a central base case may be inevitable. OCC computes the base component of its margin requirements using purely statistical estimates of correlation, but then augments that base component through additional stress testing. This stress testing assumes a variety of scenarios in which historical correlations become invalid and assumes that most risk factors could either become entirely uncorrelated (*i.e.*, a correlation of 0.0) or perfectly correlated (*i.e.*, a correlation of 1.0). We suggest that the wording of Key Consideration 5 be revised to articulate that the concern to be addressed is that of naïve reliance solely on statistical estimates and also to recognize the viability of other means of addressing that concern, such as an approach based on using statistical estimates of correlation as a base case but incorporating correlation stress test components to augment the base margin requirements.

Cross Margining

Explanatory Note 3.6.13 states that CCPs that enter into cross-margining arrangements "should also seek to *harmonise* their overall risk-management systems to the extent possible and regularly monitor possible discrepancies in the calculation of their exposures[.]"[27] We note that OCC currently has cross-margining arrangements in place with other CCPs and, as STANS is a unique margin methodology, the differences between STANS and the risk-management systems of our cross-margining partners could raise questions regarding compliance with this harmonization requirement. Reading "harmonization" to require cross-margining CCPs to adopt the same or substantially similar margin systems would effectively create a "race to the bottom" as the CCPs seek to ensure harmony. We doubt this was intended by the drafters and it is not how we read the requirement. We believe the more appropriate approach is to require a CCP seeking to enter into a cross-margining arrangement with another CCP to ensure that the other CCP has strong risk management systems and that the particular cross-margining arrangement, when viewed in its entirety, provides adequate protection for market participants.

Testing Margin Coverage

Explanatory Note 3.6.15 states that "[i]n addition to stress testing the adequacy of its total financial resources in extreme but plausible market conditions, a CCP should define a set of scenarios that will be used to test margin coverage in order to understand how the level of margin coverage might be affected by highly stressed market conditions."[28] These scenarios would be required to "*capture* a variety of historical and hypothetical scenarios, including scenarios that *capture the most volatile periods that have been experienced* by the markets for which the CCP provides its services and forward-looking scenarios to anticipate risks."[29]

We are not entirely clear what the drafters intended in drafting Explanatory Note 3.6.15. We believe the concern likely was that, if margin coverage were set at 99% VaR as estimated from some recent period, margin might not be robust in the face of more extreme market movements, whether experienced during that data period or further back in history. We note that, as currently drafted, to "capture the most-volatile periods that have been experienced by the

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27 Report, p. 45 (emphasis added).

28 *Id.* (emphasis added).

29 *Id.* (emphasis added).

markets for which the CCP provides its services" might require a CCP clearing markets for British equities to "capture"[30] the collapse of the so-called "South Seas Bubble" in 1720. This is obviously an absurd example, but a more realistic example would have a U.S. CCP "capturing" the October 1987 market crash. Note, however, that OCC clears derivatives on equity securities issued by numerous companies that did not even exist in October 1987. This necessarily introduces a speculative element into any attempt to address how products related to such companies might have behaved during that event.

We address what we believe to be the drafters' concerns in two ways: First, the risk measure upon which the various components of our margin requirements are based is Expected Shortfall rather than VaR. Whereas 99% VaR measures the least serious of the worst 1% of outcomes, 99% Expected Shortfall measures the average of the worst 1% of outcomes. Thus OCC margin coverage itself (*i.e.*, not merely "tests" applied to that coverage) captures market movements more disadvantageous than would margin based upon VaR.[31] Second, if recent market conditions have been less turbulent than longer-run average data would suggest, we scale up our margin requirements to cover at least that longer-run average turbulence. Thus, once again, OCC margin coverage, and not merely tests of that coverage, captures a longer-term perspective on risk. We recommend such approaches for the drafters' consideration.

Principle 7: Liquidity Risk

"An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources to effect same-day and, where appropriate, intraday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of [one/two] participant[s] and [its/their] affiliates that would generate the largest aggregate liquidity need in extreme but plausible market conditions."

Cover 1 Versus Cover 2 (Liquidity)

We agree that liquidity of financial resources is a critical element of sound CCP risk management. However, we believe the standards proposed in the Report are unreasonable and problematic in several key respects. First, Key Consideration 3 of Principle 7 provides that a CCP should "maintain sufficient liquid resources (that is, liquid assets and prearranged funding arrangements) to effect same-day and, where appropriate, intraday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the [one/two] participant[s] and [its/their] affiliates that would generate the largest aggregate liquidity need in extreme but plausible market

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30 We believe the use of the word "capture" in the report (both in Explanatory Note 3.6.15 and elsewhere) is ambiguous. Do the drafters intend merely that CCPs "consider" the stated scenarios, or that CCPs "cover against" such scenarios. We think the latter reading is strained, but arguable, and encourage the drafters to replace the word "capture" with either "consider" or "take account of" in order to avoid any potential for confusion.

31 Incidentally, 99% VaR can be zero for a sufficiently out-of-the-money option nearing expiration, rendering use of VaR suspect for margin purposes at CCPs serving options markets.

conditions."[32] We support a Cover 1 standard for liquidity purposes for the same reasons articulated above with respect to credit.

What Constitutes "Liquid Resources"?

Key Consideration 5 of Principle 7 defines liquid resources to include "cash at the central bank of issue and creditworthy commercial banks, as well as highly marketable collateral held in custody and investments that are readily available on a same-day basis and that are also convertible into cash with *prearranged funding arrangements including committed liquidity lines*, foreign exchange swaps, repos, or pledges."[33] Explanatory Note 3.7.10 goes on to state that "[t]o the extent possible, other funding arrangements should also be committed rather than uncommitted (or best efforts). Resources that are not prearranged should not be counted as liquid resources available to meet extreme but plausible market conditions."[34]

OCC meets its liquidity needs primarily via a $2 billion committed secured credit facility maintained with a consortium of banks that allows OCC to borrow funds on one hour's notice, backed by Treasuries held in OCC's sizable clearing fund. OCC is also developing the ability to convert U.S. Treasuries held in the clearing fund (or submitted as margin) into cash via tri-party repurchase transactions. This arrangement will be non-committed. Both the credit facility and tri-party repo transactions will allow OCC to hold a significant portion of its financial resources in the form of U.S. Treasuries, with the ability to convert the Treasuries to cash as needed. OCC believes its current approach strikes an appropriate balance between safety and liquidity.

Nothing in the Report indicates that highly-rated sovereign debt, including U.S. Treasury securities, would not constitute "highly marketable collateral." We believe highly-rated sovereign debt securities would clearly meet this standard. However, we have become aware of informal statements by certain regulators suggesting they may not share our view. We find such statements highly problematic and encourage the drafters to clarify that they concur in our view on this issue. U.S. Treasury securities have historically been the safest and most liquid of all financial assets. The market for U.S. Treasuries is currently the most liquid fixed income securities market in the world. Buyers and sellers are able to transact in this market in large quantities and at fair prices because this is a highly active and deep market, with a large number of participants. The average daily trading volume of U.S. Treasuries was more than half a trillion dollars in 2010. In times of market stress, when liquidity has dried up in other markets, liquidity in the U.S. Treasuries market has actually increased as market participants seek out instruments with demonstrated safety and security. Even at the height of the 2008 market crisis, when liquidity dried up for even the most creditworthy parties, the U.S. Treasury repo markets continued to function. In fact, during this period the prices of U.S. Treasury securities actually increased, as the demand for these securities also increased due to a global "flight to quality."

While we agree with the drafters that committed liquidity lines are desirable and preferable to non-committed lines, CCPs have little control over whether banks are willing to

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32 Report, p. 46.

33 Report, p. 47 (emphasis added).

34 Report, p. 50.

enter into or renew committed lines with them. Particularly in times of market turbulence when liquidity becomes scarce, committed lines may be impossible to obtain or renew. If CPSS-IOSCO adopts a Cover 2 requirement for liquidity purposes, the resulting liquidity pressure placed on CCPs will be substantial. Meeting these liquidity requirements without relying on non-committed liquidity facilities would be highly impractical.

OCC believes that the drafters should revise Key Consideration 5 to define "liquid resources" as: "cash at the central bank of issue and creditworthy commercial banks, as well as highly marketable collateral **(including highly-rated sovereign debt securities)** held in custody and investments that are readily available on a same-day basis and that are also convertible into cash with ~~prearranged~~ **secured** funding arrangements including**, without limitation,** committed liquidity lines, foreign exchange swaps, repos, or pledges." The drafters also should revise Explanatory Note 3.7.10 to clarify that a liquidity facility need not be "committed" in order to be considered "prearranged."

Maintaining Sufficient Liquidity Resources

An important determinant in Principle 7 is the phrase a "high degree of confidence under a wide range of potential stress scenarios[.]" We applaud the drafters for leaving CCPs with some discretion in determining what constitutes a "high" degree of confidence, and believe that we currently meet such a requirement. OCC sets as its objective the ability to meet, without delay, its daily settlement needs based on historical and projected "peak" settlement amounts. It also takes into account any liquidity that would be needed in a variety of other scenarios, including the liquidation of a defaulting clearing member's accounts or a bank settlement failure. OCC has treated cash in the clearing fund, cash working capital, and committed bank lines of credit backed by U.S. Treasury securities held in the clearing fund as being liquid capital for this purpose. We believe these assets are sufficiently liquid to meet the standards articulated in the Report.

Replenishing Resources (Liquidity)

Key Consideration 8 provides that each CCP should have "rules and procedures [that] indicate its process to replenish any liquidity resources it may employ during a stress event, including the default of the *two* participants and their affiliates that would potentially cause the largest combined liquidity needs, so that it can continue to operate in a safe and sound manner."[35] We reiterate our comments above concerning replenishment of financial resources under Principle 4.

Reverse Stress Tests (Liquidity)

Explanatory Note 3.7.15 requires CCPs to conduct reverse stress tests for liquidity purposes. We oppose public disclosure of the results of such stress tests for the reasons given above with respect to the results of reverse stress tests for credit purposes.

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[35] Report, p. 47.

Principle 9: Money Settlements

"An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money."

Commercial Bank Money

Explanatory Note 3.9.4 states that "[i]f an FMI uses a commercial bank for its money settlements, it should take steps to limit its credit and liquidity risks to the commercial settlement bank . . . [and] should establish *strict criteria* for its commercial settlement banks that address, among other things, their regulation and supervision, creditworthiness, capitalisation, access to liquidity, and operational reliability."[36] OCC recognizes the importance of selecting settlement banks with care, diversifying risk among them to the extent practicable, and monitoring their financial status. We commend the drafters for recognizing that it is impossible, strictly speaking, to conduct settlements that involve no credit or liquidity risk. We would not interpret the requirement that a CCP have "strict criteria" for its commercial settlement banks as requiring CCPs to actively monitor their settlement banks for compliance with these strict criteria, as that is a role more appropriate for various bank regulators.

Key Consideration 4 of Principle 9 requires each CCP to "closely control the credit and liquidity risks from its commercial settlement banks, including the distribution of exposures among its commercial settlement banks." [37] Explanatory Note 3.9.5 goes on to say that a CCP "should take further steps to limit its credit exposures and liquidity pressures by diversifying the risk of a commercial settlement bank failure, where reasonable, through the use of multiple commercial settlement banks and the use of concentration limits." [38] Furthermore, a CCP would be required to "closely control the full range and concentration of exposures to commercial settlement banks and assess its potential losses and liquidity pressures as well as those of its participants in the event that the commercial settlement bank with the largest share of activity were to fail." [39] We interpret the foregoing requirements to only apply where the CCP reasonably determines that taking these actions is necessary to limit its exposure to settlement bank risks. We note that there are a limited number of commercial banks that engage in the business of acting as a settlement bank for CCP participants. We believe that, in certain circumstances, the quality of the settlement banks used is a more important consideration than the concentration of risk among such settlement banks. It is not appropriate for a CCP to dictate which settlement banks its participants use, and we would expect that CCP participants would gravitate toward those banks that are perceived to be of higher quality. Furthermore, while we agree that a CCP should know its exposure to its own settlement banks, including its largest settlement bank, we believe it is reasonable to assume that the drafters do not intend for CCPs to undertake monitoring obligations that duplicate the efforts of participants' own regulators.

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36 *Id.* (emphasis added).

37 *Id.* (emphasis added).

38 *Id.* (emphasis added).

39 *Id.* (emphasis added).

Principle 14: Segregation and portability

"A CCP should have rules and procedures that enable the segregation and portability of positions and collateral belonging to customers of a participant."

Segregation and portability are central issues among regulators, intermediaries, and market participants. CCPs are constrained, however, by applicable law in their ability to offer full segregation and portability. For example, in the United States, we are constrained significantly by Rule 400(b) of the Securities Investor Protection Corporation ("SIPC"), which provides that "[a]s promptly as practicable after the initiation of a liquidation proceeding or a direct payment procedure under the [Securities Investor Protection] Act, the trustee in a liquidation proceeding, or SIPC in a direct payment procedure *shall liquidate or cause to be liquidated*, by sale or purchase, all Standardized Options positions held for the accounts of customers."[40] Although SIPC has shown some flexibility in applying Rule 400(b) in the past, and SIPC has indicated willingness to amend Rule 400 to facilitate portability, Rule 400 is but one example of possible legal impediments to achieving true customer portability. Given that significant legal impediments do exist, we appreciate the language of Key Consideration 1 of Principle 14, which states that "[a] CCP should have segregation and portability arrangements that protect customer positions and collateral *to the greatest extent possible under applicable law*, particularly in the event of a default or insolvency of a participant"[41].

We note, however, that the Report does not sufficiently recognize that there may be non-legal impediments to achieving full segregation and portability. In particular, there are economic impediments to moving to full segregation and portability for all customers, as such a system would be substantially more expensive to operate and would likely require individual customers to post more collateral to their clearing members than is currently required, irrespective of whether a particular customer believes the benefits of full segregation and portability are worth the added cost. We appreciate that Explanatory Note 3.14.5 does suggest some flexibility in this regard by indicating the possibility that a CCP may use individual or omnibus accounts and collect margin on either a gross or net basis.[42] However, we encourage the drafters to include additional flexibility in the Report.

Principle 15: General business risk

"An FMI should identify, monitor, and manage its general business risk and hold sufficiently liquid net assets funded by equity to cover potential general business losses so that it can continue providing services as a going concern. This amount should at all times be sufficient to ensure an orderly wind-down or reorganisation of the FMI's critical operations and services over an appropriate time period."

While we believe Principle 15 itself is reasonable, we recognize the challenge in converting the broad principle into requirements for CCPs. The drafters have attempted to do so

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40 Emphasis added.

41 Report, p. 66.

42 *See* Report, p. 67.

in Key Consideration 3 of Principle 15 by requiring that a CCPs "hold *equity capital* at normal times equal to *[six, nine, or twelve]* months of expenses."[43] We oppose the requirement that the assets used to fulfill the requirements of Principle 15 consist exclusively of equity and suggest that a CCP also be allowed to create a "rainy day fund" to which its clearing members would contribute and that would be available to meet the requirements of Principle 15. It seems to us that the critical question from a safeness and soundness standpoint is whether CCPs have adequate financial resources, not the form in which such resources are held. A large equity capital requirement would be impossible for OCC to meet without changing its status as a non-profit industry utility, which has greatly benefited investors. And even if OCC were to substantially increase its equity, any such increase would be trivial relative to the magnitude of OCC's obligations.

We also believe that the language, as drafted, would preclude a CCP from taking its projected revenue stream in covering its expenses. We believe CCPs should consider wind-down scenarios and calculate estimated business expenses under such scenarios, but we also believe that CCPs that can reasonably expect to continue to generate revenue during a wind-down should be allowed to consider that revenue as one means by which its expenses may be covered. OCC has a built-in income stream, even during a wind-down, because the revenue generated with respect to each open option position cleared by OCC represents only a portion of the revenue OCC would ultimately expect to generate from that position. In a wind-down scenario, OCC would expect to continue to generate fees as existing options positions are closed out.

It is our understanding that one of the reasons for the requirement that a CCP hold sufficient capital to allow it to wind down in an orderly fashion (including Principle 15, but also including provisions of Dodd-Frank and proposed rules of the CFTC and SEC) is a concern that a start-up CCP with limited financial backing might go out of business with open positions, leaving its members and regulators to step in to ensure an orderly wind-down. This would not be the case with a mature CCP such as OCC.

In addition, we believe Key Consideration 3 should be clarified to provide that the "expenses" that would be required to be covered could be projected based on a wind-down scenario. A failed CCP entering a wind-down would be expected to immediately curtail nonessential operations, thereby substantially reducing its expenses. Clearinghouses are constantly upgrading their systems, technologies, and infrastructure. They may also conduct ancillary activities, such as investor education, marketing and government relations. All of these operations and activities would promptly be terminated or drastically curtailed in the event of a wind-down, with concomitant expense reductions. We recognize that certain other expenses, including legal expenses, would likely increase in a wind-down and believe these expenses should also be considered by CCPs when establishing their projected wind-down budgets. We therefore believe that the "expenses" required to be covered by established CCPs should not be calculated based on historical operating expenses, but rather on projected wind-down budgets that reflect the continuing revenues and substantially reduced operating costs associated with a wind-down scenario. It would be appropriate for the appropriate regulator to review such budgets.

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[43] Report, p. 71 (emphasis added).

We note that Explanatory Note 3.15.8 would require each CCP to "develop and maintain a viable capital plan in order to ensure an appropriate level of capital."[44] We think this is a more appropriate standard and should be adopted in lieu of Key Consideration 3, rather than in addition to it.

Principle 17: Operational Risk

"An FMI should identify all plausible sources of operational risk, both internal and external, and minimise their impact through the deployment of appropriate systems, controls, and procedures. Systems should ensure a high degree of security and operational reliability, and have adequate, scalable capacity. Business continuity plans should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale disruption."

Two Hour Recovery Time Objective

Key Consideration 5 of Principle 17 requires each CCP to "have a business continuity plan that addresses events posing a significant risk of disrupting operations, including events that could cause a wide-scale disruption. The plan should incorporate the use of a secondary site and should ensure that critical information technology (IT) systems can resume operations *within two hours* following disruptive events. In case of extreme circumstances, settlement should be ensured by the end of the day at the latest. The [CCP] should plan and carry out a programme of tests of these arrangements."[45]

While we believe that a two hour recovery time objective ("RTO") is a laudable goal, and one that OCC and other CCPs are currently striving to achieve and may actually be able to achieve under certain circumstances, we think that current guidelines that establish the requirement to recover and resume clearing and settlement activities within the business day on which the disruption occurs with the overall goal of achieving recovery and resumption within two hours after an event remain the appropriate standards given the current state of infrastructure and technology.[46] An RTO of two hours may not be consistently achievable without sacrificing core functions and increasing the risk of errors and backlogs. Forcing CCPs to achieve a two hour RTO may cause them to take shortcuts, including skipping vital operations checks, and/or return to operations at less than full capacity. We believe that this would be ill-advised and could actually exacerbate disruptions.

OCC currently practices disaster recovery ("DR") procedures on almost a monthly basis and, while OCC strives to meet a two hour RTO, experience has shown that it often takes longer than this to fully recover and conduct operation checks. We appreciate that CCPs, and other FMIs, by their nature, are vital nodes in the global financial system and should endeavor to return to full operating capacity as quickly as possible after a disruption of service. However,

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44 Report, p. 73.

45 Report, p. 76 (emphasis added).

46 This would be consistent with the guidelines under which OCC currently operates. *See* Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System (available at http://www.occ.treas.gov/news-issuances/bulletins/2003/bulletin-2003-14a.pdf)

resumption of full CCP activities may take longer than two hours depending on the type, timing and magnitude of the disruption. Moreover, a CCP may determine under certain circumstances that it is actually preferable to wait until the next business day to resume full operations.

Principle 19: Tiered participation arrangements

"An FMI should, to the extent practicable, identify, understand, and manage the risks to it arising from tiered participation arrangements."

Indirect Participants in CCPs

Key Consideration 2 of Principle 19 requires that a CCP "ensure that its rules and procedures for direct participants allow it to gather basic information about indirect participation and to identify, monitor, and manage relevant concentrations of risk and important interdependencies. To the extent possible, an FMI should seek to identify direct participants acting on behalf of a material number of indirect participants, indirect participants with significant daily turnover in the system, indirect participants that are larger than the direct participants through which they access the FMI or that pose other specific risks."[47] While we agree that a CCP should have the ability to gather certain information from its direct participants (*i.e.*, its clearing members), we do not believe it is appropriate for a CCP to routinely police the systemic risks created by indirect participants in the CCP. We acknowledge, however, that from time to time, circumstances may make it necessary or appropriate for a CCP to monitor the systemic risk created by an indirect participant. We agree that, in order to achieve sound systemic risk management across all markets, it is important for a responsible party to track, analyze and regulate the various interdependencies that arise under the current clearing framework, however, CCPs are not generally the proper parties to fulfill this role. In the United States, regulatory agencies (*e.g.*, the SEC, CFTC, and Federal Reserve) and self-regulatory organizations (*e.g.*, FINRA and NFA) have historically been responsible for ensuring that futures and securities market intermediaries are adequately capitalized and otherwise protected from harm in the event of defaults by their major customers. For CCPs to fulfill this role would be both extremely costly to the CCPs (as they lack the information or infrastructure to perform this function at present) and entirely duplicative of, and potentially in conflict with, activities already being undertaken by the relevant regulators and self-regulatory organizations. The U.S. approach has worked well and we believe it to be more than adequate.

Principle 20: FMI links

"An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks."

We generally concur with Principle 20 and the associated Key Considerations. However, we find the following language in Explanatory Note 3.20.14 difficult to justify: "Typically, CCPs should not contribute to each other's default fund."[48] We believe that such risk management

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47 Report, p. 84.

48 Report, p. 91

details should be left to the discretion of the CCP. The drafters have provided no rationale for this statement and we believe it should be removed from the Report.

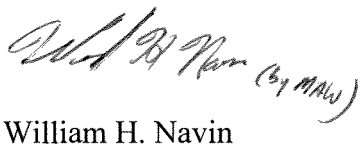
Implementation Timing

The new standards for CCPs embodied in the Report represent a massive shift from the standards in the 2004 RCCP. This shift will take substantial time to implement and should be undertaken only with careful consideration and ample flexibility given to CCPs to adapt their systems and procedures to the new requirements. The international community and our regulators must take a measured approach to implementing these changes, as rushing such substantial changes into implementation could put markets and investors at risk and jeopardize the goals CPSS-IOSCO seeks to achieve through the Report. The process of adapting to the new standards should be deliberate and CCPs should be given time to determine the best means by which to implement them.

Conclusion

OCC appreciates the opportunity to comment on the Report. We would be pleased to provide CPSS-IOSCO with any additional information or analysis that might be useful in determining the final form of the Report.

Sincerely,



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