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Committee on Payment and Settlement Systems
Bank for International Settlements
Centralbahnplatz 2
CH-4002 Basel
Switzerland

Technical Committee
International Organization of Securities Commissions
C/Oquendo 12
28006 Madrid
Spain

Ladies and Gentlemen:

The Depository Trust & Clearing Corporation ("DTCC") appreciates the opportunity to comment on the consultative report on "Principles for Financial Market Infrastructures" (the "Consultative Report", and the principles as set forth in the Consultative Report, the "Proposed Principles") published by the Committee on Payment and Settlement Systems ("CPSS") and the Technical Committee of the International Organization of Securities Commissions ("IOSCO"). DTCC believes that the Proposed Principles significantly advance the goal of modernizing and, of critical importance, harmonizing international standards for systemically important payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories. DTCC applauds the work of CPSS and IOSCO and the careful thought that has gone into the Consultative Report.

As indicated in the cover note (the "Cover Note") that accompanied the Consultative Report, the Proposed Principles are intended:

(a) to replace the standards set forth in the "Core Principles for Systemically Important Payment Systems" issued by CPSS in 2001 (the "CPSIPS Principles"), the "Recommendations for Securities Settlement Systems" issued by CPSS and IOSCO in 2001 (the "RSSS") and the "Recommendations for Central Counterparties" issued by CPSS and IOSCO in 2004 (the "RCCP"); and

(b) to constitute a single set of standards for the oversight and regulation of financial market infrastructures ("FMIs"), including all systemically important payment systems ("PSs"), central securities depositories ("CSDs"), securities settlement systems ("SSSs"), central counterparties ("CCPs") and trade repositories ("TRs").

Also as indicated in the Cover Note, comments on the Proposed Principles are due by July 29, 2011. After that, CPSS and IOSCO will publish a final report in early 2012 (the "Final Report", and the

principles as set forth in the Final Report, the "Final Principles"), along with an assessment methodology (the "Assessment Methodology") and associated requirements with respect to the preparation and public disclosure of FMI self-assessments. The current CPSS and IOSCO expectation is that the relevant regulatory authorities (i) will strive to include the final standards in their legal and regulatory frameworks by the end of 2012 and (ii) apply the final standards as part of their regulatory, supervisory and oversight activities "as soon as possible". FMIs will be expected to take "appropriate and swift" action in order to meet the final standards.

Table of Contents

Page

FMIs in the DTCC Group 3

General Comments on the Proposed Principles 3

- DTCC Support for the Proposed Principles 3
- Need for Agreement and Support of Participants and Regulators 4
- Segregation and Portability 4
- Standards for Credit and Liquidity Resource Coverage 5
- Responsibilities to Stakeholders 6
- Responsibilities to Customers of Participants 6
- FMI Implementation Period 7

Specific Comments on the Proposed Principles 8

- Proposed Principle 1: Legal Basis 8
- Proposed Principle 2: Governance 8
- Proposed Principle 3: Framework for the Comprehensive Management of Risks 10
- Proposed Principle 4: Credit Risk / Proposed Principle 7: Liquidity Risk 10
- Proposed Principle 5: Collateral 15
- Proposed Principle 6: Margin 15
- Proposed Principle 8: Settlement Finality 16
- Proposed Principle 9: Money Settlements 18
- Proposed Principle 10: Physical Deliveries 19
- Proposed Principle 11: Central Securities Depositories 20
- Proposed Principle 12: Exchange-of-Value Settlement Systems 21
- Proposed Principle 13: Participant-Default Rules and Procedures 21
- Proposed Principle 14: Segregation and Portability 21
- Proposed Principle 15: General Business Risk 23
- Proposed Principle 16: Custody and Investment Risk 24
- Proposed Principle 17: Operational Risk 24
- Proposed Principle 18: Access and Participation Requirements 25
- Proposed Principle 19: Tiered Participation Arrangements 26
- Proposed Principle 20: FMI Links 27
- Proposed Principle 21: Efficiency and Effectiveness 28
- Proposed Principle 22: Communications Procedures and Standards 28
- Proposed Principle 23: Disclosure of Rules and Key Procedures 29
- Proposed Principle 24: Disclosure of Market Data 31

Appendix -- Segregation and Portability 32

FMIs in the DTCC Group

The Depository Trust & Clearing Corporation ("DTCC") has the following subsidiaries that are FMIs:

(a) The Depository Trust Company ("DTC") is a US-regulated CSD that operates an SSS that enables securities to be transferred and settled by book-entry according to a set of predetermined multilateral rules. DTC also holds securities for its participants and provides central safekeeping and asset services.

(b) National Securities Clearing Corporation ("NSCC") is a US-regulated CCP for equities, corporate and municipal debt and other securities traded in the US financial markets.

(c) Fixed Income Clearing Corporation ("FICC") has two US-regulated Divisions. The Government Securities Division ("FICC-GSD") is a CCP for government securities traded in the US financial markets. The Mortgage-Backed Securities Division ("FICC-MBSD") currently operates a common margining regime for trades in US mortgage-backed securities. FICC-MBSD does not currently provide any guaranteed or CCP services, but plans to do so in the near future.

(d) European Central Counterparty Limited ("ECCP") is a UK-regulated CCP for equity securities traded in the European financial markets.

(e) The Warehouse Trust Company ("Warehouse Trust") is a US-regulated TR that maintains a centralized electronic record of transaction data for credit default swaps ("CDS"). Warehouse Trust also provides ancillary services for the management of trade life-cycle events and downstream post-trade processing of CDS contracts.

(f) DTCC Derivatives Repository Ltd. ("Derivatives Repository") is a UK-regulated TR that maintains a centralized electronic record of transaction data for over-the-counter equity derivatives.

(g) New York Portfolio Clearing LLC ("NYPC"), a joint venture between DTCC and NYSE Euronext, is a US-regulated CCP for futures contracts on fixed income instruments traded on US futures exchanges.

DTCC Deriv/SERV LLC ("Deriv/SERV"), a subsidiary of DTCC and the corporate parent of Warehouse Trust and Derivatives Repository, the two TRs in the DTCC group, is submitting to CPSS and IOSCO a separate letter relating to issues of particular concern to TRs. Accordingly, such issues will not be addressed in this letter.

General Comments on the Proposed Principles

DTCC Support for the Proposed Principles

DTCC believes that the Proposed Principles represent an important effort to update, consolidate and harmonize international standards for the oversight and regulation of systemically important FMIs, reflecting lessons learned from the recent financial crisis and new thinking about operations, governance, risk management, access and efficiency. DTCC supports the improvements in the standards for FMIs reflected in the Proposed Principles, and supports the Proposed Principles as a framework for achieving desirable uniformity and consistency in the standards applying to all FMIs, subject only to such

(hopefully limited) variations in application as may be required by the constraints of applicable law, market practice and the financial asset classes eligible for an FMI's specific services.

As the following discussion indicates, DTCC is broadly supportive of the enhanced standards for FMIs reflected in Proposed Principles and fully supports most of the Proposed Principles, although we note areas where clarification or modification would be useful. Our comments are intended to facilitate, in a practical, efficient and economical manner, the establishment and implementation of appropriate international standards to achieve the goal of modernizing and harmonizing the practices of FMIs globally.

While CPSS and IOSCO undoubtedly recognize the extensive nature of the changes in international standards reflected in the Proposed Principles, DTCC would ask that, in establishing global expectations with respect to the timing of implementation (for purposes of the Assessment Methodology and otherwise), CPSS and IOSCO also be cognizant of the cumulative impact of the changes in systems and procedures (and the aggregate costs of such changes) that may be required on the part of FMIs and their participants in order for FMIs to be fully compliant with the heightened standards reflected in the Proposed Principles.

Need for Agreement and Support of Participants and Regulators

There is an implication in the Consultative Report that the Proposed Principles set forth in Section 3 of the Report are "actionable" by FMIs, *i.e.*, that they are focused on matters within the control of FMIs (as opposed to matters that are the responsibilities of central banks, market regulators and other relevant authorities set forth in Section 4 of the Report). However, DTCC notes that a number of the Proposed Principles, including the Proposed Principles on which CPSS and IOSCO have specifically requested comment -- Principles 4 (Credit Risk), 7 (Liquidity Risk), 14 (Segregation and Portability), 15 (General Business Risk) and 18-20 (Access and Interoperability) -- cannot be implemented by FMIs acting alone but can only be implemented by FMIs acting together with their participants and regulators. Although DTCC is prepared to take a leadership role in the development of standards for the oversight and regulation of FMIs, FMIs alone cannot implement changes in market structure and practice without the full agreement and active support of their participants and regulators. Likewise, FMIs alone cannot incur costs to be funded by participants (for example the costs of building new systems and processes) or impose costs directly on participants (for example the costs of providing FMIs with additional financial resources and liquidity) without regard for the impact that such costs may have on participants and the financial markets such FMIs serve.

Segregation and Portability

Proposed Principle 14 (Segregation and Portability), which is new, would require a CCP to have rules and procedures that enable the segregation and portability of positions and collateral belonging to customers of participants. Although Proposed Principle 14, by its terms, applies only to CCPs, Paragraph 2.11.7 of the Explanatory Note for Proposed Principle 11 (Central Securities Depositories) would require a CSD providing custody and settlement services to a CCP to facilitate segregation and portability at the CCP.

Different markets follow different practices and regulatory regimes relating to the segregation and portability of customer assets, and the practices of FMIs currently reflect these differences. While DTCC appreciates that markets, and international standards, are evolving toward having CCPs provide more segregation and portability capabilities in their operations, and DTCC is prepared to support that evolution, DTCC believes that existing differences in market practices and regulatory regimes, and the extensive changes in current practices that this evolution will require, make it impractical to impose a consistent, mandatory segregation and portability regime globally across CCPs at this time. See our

specific comments on Proposed Principle 14 below and a summary of the extensive practical issues that would need to be resolved in one market as detailed in the Appendix to this letter.

Standards for Credit and Liquidity Resource Coverage

Current RSSS Recommendation 9 provides that a CSD should have risk controls that ensure timely settlement in the event that the single participant with the largest payment obligation is unable to settle. Current RCCP Recommendation 5 provides that a CCP should have sufficient financial resources to withstand a default by the single participant to which it has the largest exposure. In addition to focusing on credit and liquidity risk separately, the Proposed Principles would be more stringent than the current standards by defining the concept of "participant" for purposes of applying these coverage tests to include multiple affiliated participants -- a concept DTCC refers to as a "participant family" -- and potentially requiring coverage of two participant families rather than one.

The Proposed Principles distinguish between CCPs and other FMIs with respect to credit risk (the risk that a participant will not meet its financial obligations when due or at any time in the future), but treat all FMIs similarly with respect to liquidity risk (the risk that a participant will not meet its financial obligations as and when expected but may do so in the future). Proposed Principle 4 (Credit Risk) provides (i) that an FMI should have sufficient financial resources to cover its credit exposures to each participant family with a high degree of confidence, and (ii) that a CCP should have additional financial resources to cover a wide range of potential stress scenarios, including the default of the [one/two] participant [family/families] that would potentially cause the largest aggregate credit exposures in extreme but plausible market conditions. Proposed Principle 7 provides that an FMI should maintain sufficient liquid resources to effect settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios, including the default of the [one/two] participant [family/families] that would generate the largest liquidity need in extreme but plausible market conditions.

DTCC strongly supports the extension of the standards relating to credit risk and liquidity risk to encompass the obligations of a participant family rather than simply each individual participant. While DTCC's experience in the recent financial crisis -- consistent with our previous experiences -- indicated that the market recognized differences among affiliated participants and did not treat them all as necessarily imposing the same credit or liquidity risks, adoption of a standard at the "family" level appropriately reflects the potential that these relationships may cause contagion among the accounts and therefore would seem to be a prudent tightening of the standard.

The Cover Note specifically seeks comment on (i) the pros and cons of establishing a "cover one" or "cover two" requirement for credit risk for CCPs and liquidity risk for all FMIs and (ii) whether there are reasonable bases, such as differences between products or markets, that warrant different treatment of CCPs or FMIs, and the relevant risk characteristics to consider. We understand these questions to reflect a desire on the part of CPSS and IOSCO for there to be a clear and objective baseline resource requirement against which FMIs can be evaluated by their regulators, participants and the broader market, but a lack of consensus on how best to achieve this. While DTCC agrees with the need for a clear and objective baseline, we believe the focus should not be on a "cover one" versus "cover two" dichotomy, but rather on the development of more rigorous standards and methodologies for back and stress tests, requiring greater transparency into the scenarios and elements used in stress tests, and developing, to the extent practicable, more common testing standards. See our specific comments on Proposed Principles 4 (Credit Risk) and 7 (Liquidity Risk), which are combined in a single discussion below. In any event, DTCC does not believe that a "cover two" standard is reasonably achievable in regard to liquidity risk for CCPs or other FMIs processing high volumes of transactions with large aggregate values in the cash markets.

Responsibilities to Stakeholders

The Proposed Principles greatly expand the obligations of FMIs to take account of the interests of, and engage with or otherwise satisfy, a wide range of "stakeholders" beyond the owners and participants of an FMI, traditionally considered the stakeholders of an FMI.

Although there is no express definition of a "stakeholder" in the Consultative Report, Paragraph 3.2.1 of the Explanatory Note for Principle 2 (Governance) indicates that the term "stakeholder" is intended to include participants, indirect participants, participants' customers, other interdependent FMIs, regulatory authorities and "the wider market". A description of the public policy benefits of TRs appearing after Paragraph 1.14 of the Consultative Report indicates that a "stakeholder" of a TR can include exchanges, electronic trading venues, confirmation or affirmation services and third-party service providers that utilize TR data to provide complementary services. Accordingly, the "stakeholders" of an FMI (for purposes of the Proposed Principles) comprise a very large and diffuse group of third-parties, many of which are distant from, and in some cases unknown to, the FMI.[1]

DTCC would suggest that, in every place the Consultative Report refers to "stakeholders" or "relevant stakeholders" (or any other third-parties), the Final Report should indicate exactly what persons (in addition to the owners and participants of an FMI) are meant, and make it clear that an FMI has no legal obligation to any "stakeholder" unless provided by contract or pursuant to applicable law. While an FMI must necessarily be cognizant of the impact of its activities and operations on the wider market that it serves, this should not translate into the FMI having obligations to a large, diffuse and possibly unknowable group of third parties, nor should it translate into the FMI being subject to legal claims or regulatory criticism for not performing such obligations.

Responsibilities to Customers of Participants

In addition to expanding the obligations of FMIs to stakeholders generally, the Proposed Principles also in certain respects appear to require FMIs to interact directly with the customers of their participants,

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[1] Some examples of the obligations of FMIs to, or in respect of, stakeholders found in the Consultative Report are the following:

- Paragraph 3.1.5 of the Explanatory Note for Proposed Principle 1 (Legal Basis) provides that the legal basis for a TR should specifically define the rights and interests of participants and other *relevant stakeholders* with respect to the data stored by the TR.

- Principle 2 (Governance) provides that the governance arrangements of an FMI should support the objectives of *relevant stakeholders*. Key Consideration 6 provides that the strategy, rules and major decisions of an FMI should reflect the interests of its participants and other *relevant stakeholders*, and there are further references to the obligations of FMIs to, or in respect of, *relevant stakeholders* in Paragraphs 3.2.1, 3.2.2, 3.2.7 and 3.2.15 of the Explanatory Note.

- Key Consideration 4 for Proposed Principle 13 (Participant-Default Rules and Procedures) provides that an FMI should engage with its participants and other *relevant stakeholders* in periodic testing and review of its default procedures, and there are further references to the need for FMIs to engage or otherwise interact with *relevant stakeholders* in Paragraphs 3.13.2 and 3.13.5 of the Explanatory Note.

- Paragraph 3.17.11 of the Explanatory Note for Proposed Principle 17 (Operational Risk) provides that an FMI should have comprehensive physical, environmental and information security policies, and standards, practices and controls, to ensure an appropriate level of confidence and trust in the FMI by *all stakeholders*.

sometimes referred to in the Consultative Report as "indirect participants." Such direct interaction with indirect participants goes beyond (i) establishing account structures for direct participants to facilitate the segregation and portability of customer securities, as provided by Proposed Principle 14 (Segregation and Portability), and (ii) taking account of the risk that indirect participants present to FMIs through direct participants, as provided by Proposed Principle 19 (Tiered Participation Arrangements).[2]

DTCC believes that the Final Principles should not impose on FMIs any obligation to interact directly with indirect participants. As a general matter, FMIs have a contractual and operational relationship with their participants, but not with the customers of their participants. FMIs may not know the identities of such customers and participants (for competitive reasons or confidentiality concerns) may well not want FMIs to know the identities of their customers. While an FMI must necessarily be aware that in some circumstances their participants are holding securities and are conducting transactions for their customers rather than themselves, this should not translate into the FMI having obligations to persons with whom it has no contractual or operational relationship, nor should it translate into the FMI being subject to legal claims or regulatory criticism for not performing such obligations.

FMI Implementation Period

DTCC believes that the Final Report, and particularly the Assessment Methodology, must recognize that it will take some time, most likely a substantial period of time, for FMIs to become fully compliant with the Final Principles after they are adopted. This is particularly important because it appears (from the Cover Note) that FMIs will not be given an opportunity to review and comment on the Assessment Methodology before it is published by CPSS and IOSCO. Accordingly, DTCC believes that the Final Report should provide that the time for an FMI to meet the new standards should not be the "appropriate and swift action" mentioned in the Cover Note, but rather the time specified by relevant regulatory authorities, having due regard for (i) the impact of the new standards (and implementing local rules and regulations) on the current practices and infrastructure of the FMI, (ii) operational and cost considerations and (iii) other factors of importance to such regulatory authorities.

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[2] Some places in the Consultative Report where it appears that FMIs are obligated to interact directly with indirect participants are the following:

- Key Consideration 3 for Proposed Principle 1 (Legal Basis) provides that an FMI should be able to articulate the legal basis for its activities to, among others, *its participants' customers*. The first sentence of Paragraph 3.1.4 of the Explanatory Note is to the same effect.

- Key Consideration 2 for Proposed Principle 3 (Framework for the Comprehensive Management of Risks) provides that an FMI should provide, where relevant, the capacity to participants *and their customers* to manage and contain their risks. The fifth sentence of Paragraph 3.3.1 of the Explanatory Note is to the same effect, referring however more broadly to "other entities" rather than customers of participants. See also the first sentence of Paragraph 3.3.4 which provides that an FMI should employ robust information and risk-control systems to provide, where relevant, to its participants *and their customers* the capacity to obtain timely information and apply risk-management policies and procedures.

Specific Comments on the Proposed Principles

Set forth below are our specific comments on the Proposed Principles.

Proposed 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.

DTCC fully supports Proposed Principle 1 with respect to the legal basis for the activities of an FMI, but believes that certain language in Key Considerations 1 and 4 and the Explanatory Note should be modified.

Key Consideration 1 states that "[t]he legal basis should provide *a high degree of certainty* for each aspect of an FMI's activities in all relevant jurisdictions." Key Consideration 4 states, in relevant part, that "there should be *a high degree of certainty* that actions taken under [the FMI's] rules and procedures will not be stayed, voided, or reversed." There are similar references to "certainty" in Paragraphs 3.1.1, 3.1.2, 3.1.5 and footnote 20, 3.1.9 and 3.1.11. While legal *certainty* may be desirable, it may not be achievable for *each aspect* of an FMI's activities and *in all relevant jurisdictions*, (i) where laws have not been tested, (ii) where laws are changing, (iii) where laws of relevant jurisdictions may conflict and (iv) where otherwise applicable laws are subject to superseding insolvency regimes. DTCC would suggest that, in the Final Report, references to FMI's having *legal certainty* with respect to legal matters should be replaced with references to FMI's having *a sound legal basis* with respect to such matters. This would be in accord with the second sentence of Paragraph 3.1.11 which correctly notes that "[i]n some practical situations . . . full legal certainly may not be achievable."

Proposed 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.

DTCC broadly supports Proposed Principle 2 with respect to governance arrangements of an FMI, but believes that certain matters should be clarified.

<u>Governance Objectives</u>

DTCC questions whether the governance arrangements of an FMI should (or even could) support "the objectives of relevant stakeholders," as Proposed Principle 2 provides. As opposed to an obligation to support "the stability of the broader financial system" and "other relevant public interest considerations," where an FMI may obtain guidance and clarity with respect to its responsibilities in consultation with participants and regulators, "the objectives of relevant stakeholders" may very well not be known to the FMI and, at times, may very likely be conflicting. An FMI should not have the responsibility of supporting the objectives of so wide and diffuse a group of parties and interests. Current RSSS Recommendation 13 provides only for the governance arrangements of CSDs and CCPs to "promote the objectives of *owners and users*." Current RCCP Recommendation 13 similarly provides only for the governance arrangements of CCPs to "support the objectives of *owners and participants*." DTCC believes that, with respect to governance, the Proposed Principles should not impose on FMIs any obligations to "promote" or "support" the objectives of persons other than owners and participants.

Performance Reviews

The last sentence of Key Consideration 4 states that "[t]he board should review its overall performance and that of its individual board members regularly." The last sentence of Paragraph 3.2.9 states that policies and procedures related to the functioning of the board "should also include regular review of the board's performance and that of each individual member on a regular basis, as well as potentially periodic independent assessments of performance." While regular reviews of the performance of the board are certainly necessary and appropriate, DTCC believes that, within the scope of that obligation and without any further mandate, it should be left to the board to decide (i) whether to assess the performance of individual members and (ii) whether there should be independent (presumably third-party) assessment of the performance of the board as a whole or individual members. DTCC would suggest that the Final Report not include this mandate.

Board Composition

The fourth sentence of Paragraph 3.2.8 of the Explanatory Note states that the members of the board of an FMI "should be able to exercise objective, independent judgment." The Paragraph goes on to provide that "[i]ndependence from the views of management typically requires the inclusion of a sufficient number of non-executive board members, including independent board members," while noting that "[d]efinitions of an independent board member vary and are often determined by local rules." In the discussion of board composition that follows, the concept of who is a non-executive director versus an independent director is somewhat confusing. An example of the confusion caused by this distinction (between non-executive directors and independent directors) may be found in Paragraph 3.2.12 of the Explanatory Note.

The third sentence of Paragraph 3.2.12 states that there should be "an additional direct reporting line" for the risk management function of an FMI "to a non-executive director on the board via a chief risk officer (or equivalent)." The fifth sentence of Paragraph 3.2.12 states that the board risk committee of an FMI "should be chaired by a sufficiently knowledgeable independent board member and consist of a majority of board members that are independent of management." Both references to a "non-executive director" in the third sentence of the Paragraph and to board members who are "independent of management" in the fifth sentence of the Paragraph, appear to simply mean directors who are not management directors, who may or may not be affiliated with a participant. It is confusing to have different terms used to refer to the same category of directors, particularly since the term "independent" seems to have a different meaning elsewhere in the Explanatory Note. DTCC believes that the confusion caused by this inconsistency should be addressed in the Final Report.

Further, DTCC believes considering non-management directors who may be affiliated with a participant to be "non-executive" directors is particularly important in the context of risk, as the likelihood of finding a qualified director suitably knowledgeable about risk matters applicable to the FMI is significantly higher if a participant-affiliated director would satisfy the requirement. DTCC would request that it be made clear in the Final Report that the chairman of the board risk committee of an FMI and a majority of its members may be directors who are affiliated with participants, and that it is not intended that such directors be independent of *both* management and participants. Because risk is such a complex subject, it would be difficult to find suitably knowledgeable candidates to staff a board risk committee with a chairman and a majority of members who are not affiliated with participants. And because risk is a subject that affects participants directly and critically, it would be unfair to require that they be permitted to constitute only the minority of a committee that is chaired and controlled by persons who are not management directors or directors affiliated with participants.

Model Validation

The third sentence of Paragraph 3.2.13 of the Explanatory Note states that, with respect to model validation, "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." DTCC assumes that the independent review of adequacy and effectiveness may be performed by internal personnel who are provided with sufficient independence by the FMI for this purpose, and that Proposed Principle 2 would not require that an FMI engage a third-party tester or reviewer to perform these functions. This would seem to be the case from the second sentence of Paragraph 3.2.12, dealing with risk-management governance, which provides that "[i]t is essential that risk-management personnel within an FMI have sufficient independence, authority, resources, and access to the board to ensure that the operations of the FMI are consistent with the risk-management framework set by the board." Similarly, the third sentence of Paragraph 3.3.7 of the Explanatory Note for Proposed Principle 3, dealing with internal controls, provides that "[a] robust internal audit function can provide an independent assessment of the effectiveness of an FMI's risk-management and control processes." DTCC would suggest that this be clarified in the Final Report.

Proposed Principle 3: Framework for the Comprehensive Management of Risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

DTCC fully supports Proposed Principle 3 with respect to the management of risks by an FMI, but believes that certain matters in Key Consideration 3 and the Explanatory Note should be clarified.

Key Consideration 2 states that "[a]n FMI should provide the incentives and, where relevant, the capacity to participants and their customers to manage and contain their risks." The next to last sentence of Paragraph 3.3.1 expands upon Key Consideration 2. It states that "[a]n FMI should provide appropriate incentives and, where relevant, the capacity for its participants and other entities to manage and contain their risks vis-à-vis the FMI." Paragraph 3.3.4 states that "an FMI should employ robust information and risk-control systems to provide itself and, where relevant, its participants and their customers with the capacity to obtain timely information and apply risk-management policies and procedures." Paragraph 3.3.5 refers to "participants and other interdependent entities."

The term "capacity" is not defined in the Consultative Report, and it is unclear what capabilities FMIs are expected to provide and to whom. DTCC would suggest that the Final Report should explain what is meant by "capacity", so that an FMI will know exactly what it is expected to provide to participants pursuant to Proposed Principle 3 beyond the scope of its normal service offerings. Depending on how concrete the capabilities intended to be required are, it may not be appropriate to require an FMI to extend such capabilities to the customers of its participants (Key Consideration 2 and Paragraph 3.3.4) let alone other entities (Paragraph 3.3.1), or to require any other direct detailed provisioning of information or capabilities between an FMI and such customers or other entities.

Proposed Principle 4: Credit Risk / Proposed Principle 7: Liquidity Risk

Proposed Principle 4

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.

Proposed Principle 7

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.

In General

Proposed Principles 4 and 7 seek to modify the current standards set forth in the RSSS and the RCCP in several fundamental ways, and the bases for these modifications are consistent across both Proposed Principles. Accordingly, DTCC's comments on these two Proposed Principles are grouped together below.

DTCC fully supports the objectives articulated in Proposed Principles 4 and 7 with respect to an FMI's ability to ensure proper control of credit and liquidity risks, and believes that the broad substance of the Proposed Principles appropriately addresses these issues. We would, however, offer our comments on certain of the specific changes included in the Proposed Principles, in the interests of crafting more effective global standards for FMIs in these areas.

As noted in our introductory comments, we understand the request for comment on the pros and cons of a "cover one" versus a "cover two" requirement to reflect a desire on the part of CPSS and IOSCO for a clear and objective baseline resource requirement against which FMIs, and CCPs in particular, can be evaluated by their regulators, participants and the broader market. In DTCC's view, framing the standards for an FMI's coverage levels for credit or liquidity risks in terms of a stipulated number of its members no longer represents a sufficient methodology for determining the adequacy of an FMI's resources. While Lamfalussy-style standards have provided a solid foundation for the evolution of FMIs over the past few decades, in DTCC's view it is time to move beyond these methodologies and to shift the focus to the development of more rigorous standards and methodologies for back and stress tests, requiring greater transparency of the scenarios and elements used in stress tests and developing, to the extent practicable, more common testing standards.

Within this framework, there are a number of considerations that we believe are relevant to determining what testing scenarios or requirements are appropriate -- so that even while a particular scenario may be deemed appropriate for calculating the amount of financial resources that an FMI or CCP should maintain to cover credit risk, the same scenario may not be appropriate for use in determining the same FMI's or CCP's liquidity needs.

Standards Based on Testing Methodologies

We believe it would be more useful for Proposed Principles 4 and 7 to incorporate as the requisite tests for the adequacy of the resources covering an FMI's credit and liquidity risk exposures the use of standard guidelines for stress testing of credit and liquidity exposures that will allow for comparisons across FMIs and, in particular, CCPs. In this context, DTCC recommends that CPSS and IOSCO develop, in consultation with a working group of CCPs (and other FMIs as appropriate), a set of standard guidelines for stress tests that will allow for comparisons between CCPs, and DTCC would be pleased to

participate in such an effort. The prescribed standard international guidelines may reflect stress events from an appropriate historical period, and can take the form of yield curve shifts, equity price stresses, or credit spread shocks, for example, that reflect market conditions for the business that the CCP clears, and should include qualitative factors. These guidelines would then be tailored to appropriately apply to particular markets and asset classes. By creating uniform guidelines, CPSS and IOSCO will be able to establish standards that will allow appropriate comparisons across CCPs while ensuring that exposures unique to each CCP, and its unique business realities and circumstances, are adequately addressed. Such an approach would offer a more flexible and forward-looking means of assessing the adequacy of a CCP's resources against the profile of its credit and liquidity risks.

Further, we would suggest that these uniform guidelines may not be sufficient in all cases. It may be necessary for FMIs to create additional stress scenarios that reflect extreme but plausible events relevant to (i) an FMI's particular business structure, (ii) the particular asset class cleared and settled by the FMI, (iii) the market in which the FMI operates, (iv) the regulatory regime under which the FMI operates and (v) the political and historical circumstances that have shaped the jurisdiction in which the FMI is located and does business.

Standards Based on Member Coverage

In contrast, simply modifying the legacy, Lamfalussy-based standard to increase the number of participant families expected to be covered is unlikely to be sustainable for several reasons. DTCC believes that the simultaneous failure of two participant families that would potentially cause the largest aggregate credit and/or exposure is highly implausible. Over the past 35 years the FMIs in the DTCC group have experienced a number of participant defaults; however, in no such instance has the default been of the relevant FMI's largest participant (let alone largest participant family), or the default of its second largest participant (let alone second largest participant family). In fact, in the recent default of Lehman, not all of Lehman's affiliates defaulted -- and even those that did default did not all default simultaneously. Against that history, it is difficult to contemplate a stress scenario in which all of the entities in the two largest participant families in an FMI default simultaneously on the same day. We recognize that past history provides no guaranty that an event could not occur in the future, and we concur with the need to include forward-looking scenarios. However, forward-looking scenarios still must pass a plausibility test, and DTCC does not believe that, given the lessons of history and other considerations, the premise that the two largest financial institution members of an FMI and all their affiliated members would fail on the same day, can be considered plausible enough that an international standard for FMI coverage of credit and liquidity risk should be based on it. [3]

Further, regulatory reform in the United States and other countries in the wake of the recent financial crisis and the implementation of the requirements of Basel III make it even more improbable that there could be a stress scenario in which all of the entities in the two largest participant families in an FMI default simultaneously on the same day. This is because such large systemically important participants will now be now subject to (i) heightened regulatory oversight, (ii) increased capital requirements, (iii) limitations on their risk-taking activities, and (iv) probable resolution under orderly wind-down regimes. In this connection, see, for example, Section 210(c)(8)(G) of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act") which obliges the Federal Deposit Insurance Corporation (the "FDIC") to use its best efforts to meet all margin, collateral and settlement obligations of covered financial companies (as defined) for which the FDIC has been appointed as receiver that arise

[3] We also note that no empirical study has been conducted that demonstrates that the default of an FMI's participant with the largest credit exposure would lead to (or is correlated with) the default of the FMI's participant with the second largest exposure.

under qualified financial contracts cleared by or subject to the rules of a clearing organization, as required by such rules when due.[4] We recognize that there may be circumstances in which these protections will not prevent a participant from failing; however, we do believe that these protections make it extremely improbable that all of the affiliated participants in the two largest participant families in an FMI will all default simultaneously on the same day.

While we agree it is appropriate to include multiple defaults in both credit and liquidity risk analysis, they should be incorporated through more plausible scenarios with respect to, among other things, correlation and timing.

Even more critically, requiring an FMI to maintain the requisite amount of *liquidity* resources to meet a "cover two" standard could have a significant adverse impact on the FMI's participants and the financial markets generally. Unlike the derivatives market where a CCP's liquidity requirements to close-out transactions generally result from mark-to-market payments, the cash markets require a significant liquidity outlay by CCPs for the duration of the settlement cycle (that is, from date of insolvency through the next several days). Mandating the coverage of the two largest participant families will require a significant draw on liquidity from the market -- particularly in high value markets such as the sovereign debt markets where this could result in liquidity requirements in the hundreds of billions of dollars.[5] The decreasing availability of credit and the wrong-way risk inherent in drawing on committed liquidity during periods of market stress will be exacerbated by requiring coverage for the FMI's two largest participant families; this will result in a significant increase in required liquid deposits, thus introducing systemic risk to the marketplace. Moreover, the principal sources of FMI liquidity are funds provided by the FMI's participants (either by permitted borrowing of clearing/default funds or requiring participants to provide contingent liquidity), supported by committed commercial bank facilities. Imposing such an obligation on FMIs, and CCPs in particular, would further concentrate liquidity risk among a limited group of money center banks (should such funding even be available). If sufficient commitments were not reasonably available from commercial sources, such an obligation could impose additional liquidity stress (and wrong-way risk) on the FMI's participants, increasing systemic risk.

This increase will drain a large amount of liquid assets from the market, thereby reducing its overall liquidity, and potentially would lead to more bilateral trades as market participants seek to avoid the extraordinary liquidity charges to support the functioning of the FMI. Taken together, this leads us to conclude that imposing such a liquidity requirement not only would create or exacerbate systemic risk, but is highly impractical.

Back and Stress Testing

DTCC supports the use of regular back and stress testing to monitor the sufficiency of collected margin levels vis-a-vis the risk posed by participant portfolios. CCPs should be obligated to properly account for the risk posed by its participants by ensuring that the margin collection for credit risk performs at or

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[4] Under the resolution provisions of the Dodd-Frank Act and similar legislation being proposed in other countries, we believe it more likely that resolution authorities such as the FDIC will seek to resolve troubled institutions in an orderly manner designed to preserve the value of the institution and minimize market disruption. Such an approach would enable the institution to wind down its positions at the FMIs in which it participates in an orderly manner, and without adding undue liquidity strains to the marketplace. This approach would be preferred, as it would not reward moral hazard, but instead enable the institution's positions to be resolved in a manner that mitigates risk for the FMI's other participants and the marketplace as a whole.

[5] DTCC would be willing to share more specific data as to the magnitude of such obligations with CPSS and IOSCO on an individual, confidential basis, and we believe other FMIs would be willing to do so as well.

above the 99th percentile. This can be accomplished through margin adjustments based on one for more of the following factors:

- Back and/or applicable stress testing results
- Appropriate risk-based shifts in volatility parameters
- Intraday risk measurement and collection margin
- Holding period extensions for illiquid or concentration exposures
- Other risk metrics deemed appropriate by the FMI to measure extreme exposure reflecting their asset classes and market risks

DTCC also suggests that Proposed Principle 4 and its Key Considerations be clarified to (i) confirm that, while back testing is done on a daily basis, the set of data points covered with back testing is over a longer period of time, such as the prior 30, 90 or 365 days, and (ii) recognize that daily back testing will necessarily result in fluctuations around the target value and that these expected deviations should not necessarily require the CCP to take action, unless certain thresholds established by the CCP are exceeded.

Key Consideration 6 of Proposed Principle 4 provides that a CCP's stress-testing program include "reverse stress tests" that seek to identify extreme market conditions for which the CCP's financial resources would be insufficient. Similarly, Key Consideration 7 of Proposed Principle 7 provides that an FMI's stress-testing program include "reverse stress tests" that seek to identify extreme market conditions for which the FMI's liquid resources would be insufficient. DTCC does not believe that the Proposed Principles should require FMIs to place much reliance on the results of these tests. While the results of a reverse stress test may be interesting, it is unclear what the usefulness of the test would be since, by definition, an FMI is not required to maintain the financial or liquid resources sufficient to protect it under the market conditions identified by the reverse stress test.

Appropriate Liquidity Resources

Proposed Principle 7 requires FMIs to maintain sufficient liquid resources to effect same day and, where appropriate, intraday settlement obligations. We recommend the deletion of the last sentence of Key Consideration 3, which requires CCPs to have sufficient resources to effect a same-day close out or hedging of the [one/two] participant[s] and [its/their] affiliates with the largest potential liquidity needs in extreme but plausible market conditions. This requirement contradicts other discussion in the Consultative Report, particularly Paragraph 3.13.1 of the Explanatory Note to Principle 13 (Participant - Default Rules and Procedures), which indicates that the objective of default rules should be to manage and close out a defaulting participant's positions and liquidate any applicable collateral in a prudent and orderly manner, as well as limiting disruptions to the market.

As noted above, cash market CCPs require a significant outlay of liquidity resources over the duration of the settlement cycle. In this context we note that certain contingent liquidity resources would not appear to qualify as "liquid resources" within the meaning of the Explanatory Note if they are not available on a same day basis on the date of insolvency of a major participant. However, we believe that such contingent arrangements *should* be included for purposes of determining the amount of available liquidity resources to the extent that such arrangements *are* available on a next day basis to provide funding for settlement on the dates following the date of insolvency (DOI+1, DOI+2 and/or DOI+3) to cover contingencies in extreme circumstances. We believe that this approach is appropriate and consistent with

the approach outlined in Paragraphs 3.7.16 and 3.7.17 (Contingency Planning for Uncovered Liquidity Shortfalls) of the Explanatory Note.

Proposed Principle 5: 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.

DTCC supports the concepts set forth in Proposed Principle 5, but believes that some clarifications would be helpful.

The phrasing of this Proposed Principle suggests that it is referring to collateral in the sense of margin deposits, and we would agree that in the context of margin deposits this approach makes sense. However, FMIs may take collateral in other contexts -- for example, CSDs and SSSs may take a lien or interest in the securities subject to settlement until payment is effected ("in flight collateral"). In this context they may take collateral that is more diverse than cash and sovereign debt, and in some instances it is not possible to limit such collateral to assets with "low credit, liquidity and market risk." We note, however, that Key Consideration 1 appropriately provides that the FMI should "generally" seek to limit accepted collateral in this way, and that this reflects an appropriate balancing of interests. It would be helpful to have this balance more clearly reflected in the Final Report.

Key Consideration 4 and the discussion in Paragraph 3.5.5 of the Explanatory Note both call for practices in determining and setting haircuts for collateral valuation that reduce the potential for procyclical changes in haircut levels. Again, however, the phrasing of Paragraph 3.5.5 recognizes that at times such changes may be necessary. DTCC agrees that methodologies to establish haircuts should be formulated in ways that seek, to the extent practicable to minimize procyclical changes.

Proposed Principle 6: 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.

DTCC supports the concepts set forth in Proposed Principle 6, but believes that some clarifications would be helpful.

Stress Events and Procyclicality

Proposed Principle 4 (Credit Risk) is intended to cover the risk a CCP faces in the event of a participant default. It recognizes that coverage includes both margin (generally defined as initial margin, or the amount typically collected to cover potential changes in the value of the participant's position over the appropriate close-out period) as well as additional resources such as a default or guaranty fund, or additional amounts collected as part of an aggregate clearing fund. We understand that the margin component is intended to cover the closeout of a defaulting participant's positions at a 99% confidence level.

Key Consideration 3, and the related discussion in Paragraph 3.6.10 of the Explanatory Note, provide that a CCP should, "to the maximum extent practical and prudent" adopt relatively stable and conservative margin requirements to avoid procyclical changes. The discussion apparently recognizes that margin models (such as VaR or SPAN) are inherently procyclical, in that as volatility increases so will the amount of the required initial margin. We do not read Key Consideration 3 or Paragraph 3.6.10 as in any

way suggesting that such margin models are inappropriate or should be changed to avoid their procyclical effects; rather we understand the discussion to suggest that CCPs should consider adding *additional* countercyclical elements to their margin models or as part of additional prefunded default resources. If the intent here is to create such countercyclical measures, then this would have the result of increasing initial margin (certainly in less volatile periods) to amounts above a 99% confidence level. We would suggest that the discussion be clarified to express exactly what CPSS and IOSCO intend in this regard.[6]

Portfolio Margining

Key Consideration 3 requires a 99% confidence level for "each spread within or between products for which portfolio margining is permitted" and for each clearing member's portfolio losses. Paragraph 3.6.12 of the Explanatory Note indicates that a CCP may allow offsets or reductions in required margin between products if the price risk of one product is "significantly and reliably" correlated with the price risk of another product. It is unclear as to whether this language is intended to permit correlations where offsets or reductions appropriately reflect the *degree* of correlation, or only where the degree of correlation is itself "significant".

More importantly, given that profits and losses on participant closeouts are calculated on an entire portfolio basis (or for those CCPs which segregate house and client positions, on a portfolio basis across house and client accounts separately), DTCC believes that a 99% confidence level at the relevant closeout portfolio may be the more appropriate level than requiring 99% confidence for each product or product spread. (The discussion of spreads between or within products would appear to refer principally to derivative products.) This ensures that the exposure is margined based on the individual component product basis and calculated based upon an adequate time horizon for closeout of the relevant portfolio(s).

Backtesting

Key Consideration 6 states that "rigorous daily backtesting" will be required. DTCC agrees that some form of daily backtesting process is appropriate, but we note that in certain high volume markets (such as in the United States) this is done through the use of an automated process to derive a "coverage component" element in the margin methodology that automatically calculates coverage shortfalls and collects an amount to cover the shortfall. The more traditional process to "analyse and monitor" model performance through backtesting occurs less frequently than daily (although all daily results in a given period are calculated and analysed). DTCC's view is that this more comprehensive approach would be acceptable under the Proposed Principle, and it would be helpful to have this made clear in the Final Report.

Proposed Principle 8: Settlement Finality

An FMI should provide clear and certain final settlement, at a minimum, by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

DTCC broadly supports the concepts set forth in Proposed Principle 8, but is concerned with the possible implications of certain language in Key Consideration 2 and the Explanatory Note.

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[6] We would suggest that addressing procyclicality is a larger and broader financial market issue that should be addressed through more direct means than FMIs and the clearance and settlement of securities. Rather than introduce incremental margin changes to address procyclicality (and the associated complexity that that would involve), DTCC believes that addressing more fundamental drivers of procyclicality such as leverage, risk transparency, changes in credit appetite, etc. are more critical for the financial industry, and a CCP's countercyclical margin adjustments are likely to have little impact on overall systemic risk.

RTGS and Multi-Batch Settlement Versus DNS

Proposed Principle 8 and language in Key Consideration 2 and the Explanatory Note convey conflicting messages about the relative desirability of real time gross settlement ("RTGS") or multi-batch settlement compared to deferred net settlement ("DNS"). The Proposed Principle states that RTGS or multi-batch settlement is desirable "where necessary or preferable," but language in Key Consideration 2 and the Explanatory Note appear to reflect an absolute preference for RTGS or multi-batch settlement over DNS in all cases.

While Proposed Principle 8 does not go quite so far as to expressly mandate the use of RTGS or multi-batch settlement by all FMIs, the reference to "final settlement intraday or in real-time" in Proposed Principle 8 and the strong suggestion in Key Consideration 2 that an LVPS, CSD or SSS "should consider adopting RTGS or multiple-batch processing" may have the effect of establishing RTGS or multi-batch settlement as "best practice" for FMIs. If the Assessment Methodology to be adopted by CPSS and IOSCO in connection with the Final Report also reflects this preference for RTGS or multi-batch settlement over DNS in all cases, it may make it harder for FMIs that use DNS to establish compliance with the Final Principle.

While DTCC recognizes that there is a developing view that FMIs should move from DNS to RTGS or multi-batch settlement where possible, DTCC believes that RTGS, multi-batch settlement and DNS are all appropriate alternative methods of achieving finality depending on the type of product that is cleared and settled and the structure of the market in which the product is traded. In fact, on this basis, the FMIs in the DTCC group employ both RTGS (FICC-GSD for government securities) and DNS (NSCC and DTC for equities, corporate and municipal debt and other securities). DTCC believes that an FMI, together with its participants and regulators, are the appropriate parties to determine what method the FMI will use to achieve finality, having regard to the relative risk and relative benefits of RTGS, multi-batch settlement and DNS in the particular circumstances of its business and the market in which it operates. There should not be an implication that RTGS or multi-batch settlement is always the superior standard.

DTCC is in the early stages of investigating changes to the settlement practices of its FMI subsidiaries for US equity settlements (DTC and NSCC) that may over time establish a basis for transitioning these systems to multi-batch settlement. Such a change, however, would require extensive work both for DTCC and its participants, and would involve a complex, multi-year effort to complete. Undertaking this effort would involve extensive efforts initially to establish the requisite market consensus to proceed with the change, to incur the significant costs that would be involved in such a change, and to ensure the appropriate regulatory support and action to authorize such a change.

Whether an FMI offers only DNS, or is transitioning from DNS to RTGS or multi-batch settlement, the FMI should be considered to be fully compliant with Final Principle 8 for purposes of the Assessment Methodology and all other purposes (including Basel III) so long as it provides clear and final settlement by the end of the value date (as provided in Proposed Principle 8); if it is transitioning from DNS to RTGS or multi-batch settlement, it should be considered fully compliant during the transition period.

Settlement Finality and Delivery Fails

The Proposed Principle, Key Consideration 2 and Paragraphs 3.8.1 and 3.8.3 all provide that final settlement must occur no later than the end of the "value date." We think it should be made clear in the Final Report than an FMI would not be considered to be non-compliant with Proposed Principle 8 as a result of a delivery fail by a participant since delivery fails are a characteristic of all securities settlement systems.

Legal Regime

Finally, Paragraph 3.8.2 of the Explanatory Note states that "[t]he legal regime governing the FMI, including the insolvency law, must acknowledge the discharge of a payment, transfer instruction, or other obligation between the FMI and system participants, or between or among participants, for the transaction to be considered final." While we agree that such a standard must apply to the legal regime governing an FMI, this requirement should be included (if at all) among the responsibilities of central banks, market regulators and other relevant authorities for market infrastructures set forth in Section 4 of the Consultative Report rather than in any of the Proposed Principles applicable to FMIs since this is not anything within the control of an FMI.

Proposed 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.

DTCC fully supports Proposed Principle 9 with respect to money settlements, but believes that certain matters in Key Consideration 4 and the Explanatory Note should be clarified.

To put these concerns in context, it should first be noted that FMIs in the DTCC group use a number of different money settlement models:

(a) DTC is a member of the Federal Reserve System of the United States (the "Federal Reserve"). Participants which are members of the Federal Reserve settle for themselves through the Federal Reserve in central bank money. Participants which are not themselves members of the Federal Reserve settle in central bank money through commercial banks which are members of the Federal Reserve and which meet eligibility criteria established by DTC. Participants are allowed to choose any settling bank which meets such criteria.

(b) NSCC is not itself a member of the Federal Reserve, but DTC maintains a sub-account for NSCC at the Federal Reserve. Participants which are members of the Federal Reserve settle for themselves through the Federal Reserve in central bank money. Participants which are not themselves member of the Federal Reserve settle in central bank money through commercial banks which are members of the Federal Reserve and which meet eligibility criteria established by NSCC. Participants are allowed to choose any settling bank which meets such criteria.

(c) FICC-GSD is not itself a member of the Federal Reserve, but for its funds-only settlement process DTC maintains a sub-account for FICC-GSD at the Federal Reserve. Participants which are members of the Federal Reserve settle for themselves through the Federal Reserve in central bank money. Participants which are not themselves members of the Federal Reserve settle in central bank money through commercial banks which are members of the Federal Reserve and which meet eligibility criteria established by FICC-GSD. Participants are allowed to choose any settling bank which meets such criteria.

As indicated above, FMIs in the DTCC group use a tiered money settlement model where participants use commercial settling banks to settle their money obligations to the FMIs in the DTCC group in central bank money.

Key Consideration 4 states that "[a]n FMI should closely control the credit and liquidity risks from its commercial settlement banks, including the distribution of exposures among its commercial settlement banks." The first sentence of Paragraph 3.9.5 of the Explanatory Note states that "an FMI 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." Similarly, the last sentence of Paragraph 3.9.5 states, with respect to concentration risk, that "[a]n FMI should 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."

DTCC believes that Key Consideration 4 and Paragraph 3.9.5 (quoted above) should not be read to require an FMI in a tiered money settlement system to take any action (beyond establishing reasonable eligibility criteria) to limit the freedom of a participant to choose its own settling bank based on commercial considerations. DTCC would request that this be clarified in the Final Report and that the Final Report acknowledge the fact that, as a practical matter, it may not be possible to avoid some level of concentration risk given that there are a limited number of commercial banks willing to take on this business.

Paragraph 3.9.4 of the Explanatory Note provides that, if an FMI settles in commercial bank money rather than central bank money, it "should establish strict criteria for its commercial settlement banks that address, among other things, their regulation and supervision, creditworthiness, capitalization, access to liquidity, and operational reliability." Paragraph 3.9.4 goes on to provide that "[a] commercial settlement bank should be subject to effective banking supervision and regulation. It should also be creditworthy, well capitalized, and have ample liquidity from the market place or the central bank of issue. It should also have the technical capacity to provide reliable payment services at the times and on the terms required by the FMI. An FMI should actively monitor strict adherence to these requirements on an ongoing basis."

DTCC believes that this requirement, which by its terms applies to the commercial bank that an FMI uses when an FMI uses a commercial bank as its *settlement* bank and settles in commercial bank money, should not be read to apply to the *settling* bank a participant uses in a tiered money settlement model to settle its obligations to the FMI in central bank money. While that level of diligence and supervision may be necessary and appropriate with respect to the commercial bank an FMI uses as a *settlement* bank, that level of diligence and supervision is not necessary or feasible with respect to the substantial number of *settling* banks that participants use to send and receive payments of central bank money in a tiered money settlement. That review is more properly the responsibility of the regulators of such banks and the participants which entrust such banks with their funds. DTCC would request that this be clarified in the Final Report.

Proposed Principle 10: Physical Deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

DTCC fully supports Proposed Principle 10.

Proposed Principle 11: Central Securities Depositories

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.

DTCC fully supports Proposed Principle 11 with respect to the safekeeping and transfer of securities and the immobilization or dematerialization of certificates. Proposed Principle 11 sets forth clear and appropriate standards for the operations of central securities depositories and methods to assure that they meet their responsibilities. DTCC believes, however, that it would be helpful to clarify certain language in the Proposed Principle and the Explanatory Note.

The second sentence of Proposed Principle 11 states that a CSD "should maintain securities in an immobilized or dematerialized form." Similarly, the fifth sentence of Paragraph 3.11.4 of the Explanatory Note states that "[a] CSD should . . . hold securities in an immobilized or dematerialized form and transfer securities via book entry [footnote omitted]." DTCC understands this language in Proposed Principle 11 and Paragraph 3.11.4 of the Explanatory Note to mean that securities *which meet appropriate eligibility criteria for custody and transfer by book-entry* should be maintained in an immobilized or dematerialized form. For example, in the United States, securities that are subject to transfer restrictions may not be deposited in DTC because they may not be the subject of book-entry transfer.

The last sentence of Paragraph 3.11.4 of the Explanatory Note states that, where legal requirements may limit the possible implementation or extent of immobilization and dematerialization, "a CSD and the relevant authority should strive to support securities immobilization or dematerialization to the greatest extent possible, such as though the use of incentives." DTCC understands this reference to "incentives" in Paragraph 3.11.4 to mean, insofar as a CSD is concerned, the recognized efficiencies of central custody and book-entry transfer and not any financial concessions or inducements to holders or others to deposit securities in the CSD.

The third sentence of Paragraph 3.11.5 of the Explanatory Note states that, in addition to segregating its participants' securities from its own securities and other participants' securities, "a CSD also should support the segregation of securities belonging to a participant's customers on the participant's books by providing appropriate accounts and services and facilitate the portability of customer holdings, should the participant default, to another participant." DTCC understands this to mean that a CSD should offer its participants subaccounts and/or services by which a participant can segregate its customers' securities, on an omnibus-account basis or customer-level basis, but that (i) the CSD should not thereby be required to title such accounts as customer accounts and (ii) the participant's customers should not thereby have any rights against the CSD with respect to the securities credited to such accounts.

The third sentence of Paragraph 3.11.7 of the Explanatory Note states, in relevant part, that "[a] CSD providing custody and settlement services to a CCP should facilitate segregation and portability at the CCP. . . ." Proposed Principle 14, dealing with segregation and portability, by its terms applies only to CCPs. DTCC thus understands this reference to "facilitate" in Paragraph 3.11.7 to mean only that the CSD will comply with instructions given by the CCP (or its legal representative) to the CSD, in accordance with its rules and procedures, with respect to the receipt or delivery of settlement of securities through the CSD.

DTCC would request that the foregoing matters be clarified in the Final Report.

Proposed Principle 12: Exchange-of-Value Settlement Systems

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

DTCC fully supports Proposed Principle 12 with respect to the settlement of two linked obligations as an appropriate articulation of the responsibility of an SSS to eliminate principal risk in the settlement of the transactions it processes.

Proposed Principle 13: Participant-Default Rules and Procedures

An FMI should have effective and clearly defined rules and procedures to manage a participant default that ensure that the FMI can take timely action to contain losses and liquidity pressures, and continue to meet its obligations.

DTCC fully supports Proposed Principle 13 with respect to participant-default rules and procedures as reasonable and appropriate global standards in this area.

Paragraph 3.13.5 indicates that FMIs should have "internal plans" articulating the FMIs practices in carrying out participant-default procedures, and suggests that such plans should be reviewed "at least once a year" if not more frequently. DTCC would suggest that an annual review cycle is rather more frequent than seems necessary as a practical matter; a more general requirement for a "periodic" review would be sufficient.

Key Consideration 4 states that "[a]n FMI should engage with its participants and other relevant stakeholders in the periodic testing and review of its default procedures to ensure that they are practical and effective." The last sentence of Paragraph 3.13.2 of the Explanatory Note states that "[a]n FMI should engage with its participants and other relevant stakeholders in developing its default rules and procedures." DTCC believes, and would suggest that the Final Report make it clear, that, with respect to the testing and review of its participant-default procedures (Key Consideration 4), an FMI should only be required to "engage" with its participants, regulatory authorities and other parties that the FMI reasonably determines need to be involved in the default closeout process, and not any other part of the "wider market." See also our comments on Proposed Principle 2 (Governance) above.

Proposed 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.

Recent events have served to bring greater focus, appropriately, on issues of customer protection. This approach makes the most sense where -- as in the case of derivatives -- positions may stay open for a significant period of time and are maintained at the CCP.

Given the variety of practices followed in this area in different geographic markets and in the markets for different asset classes, DTCC believes that it is necessary to proceed cautiously in this area. Footnote 90 of the Consultative Report, for example, correctly notes that the adoption of certain practices by cash market CCPs in certain jurisdictions will require careful study, particularly where alternate protections are currently provided. DTCC recognizes that the cash markets may ultimately evolve toward a segregation approach like the current listed derivatives (omnibus) model, so that cash market CCPs could implement arrangements to facilitate the optional segregation and portability of customer positions and collateral,

and DTCC would be supportive of such evolution, but this would require a significant market-wide multi-year undertaking, and the resolution of a number of critical issues.

To achieve segregation of customer positions and collateral at CCPs for the cash markets in the United States would involve significant changes in market structure and applicable regulatory and insolvency rules, and would be very costly to participants, trading platforms and settlement interfaces, because changes would have to be made in systems handling order management, trading, settlement, reconciliation, CCP trade capture, clearing and settlement, and settlement interfaces, *i.e.*, CSD or clearing bank systems.

Cash market CCPs would also need to reevaluate their liquidity needs and sources under a segregation regime. If clearing fund collateral posted on behalf of client accounts were not available as a liquidity source (as being segregated client funds), then that would impact the CCP's liquidity requirements and potentially impose greater burdens on participants to either provide direct or contingent liquidity resources to the CCP in the event of a participant default.

Moreover, it is important to note that segregation and portability are two separate issues, and merely providing for segregation of open customer positions will not ensure that they will be readily -- or timely -- portable, particularly in the event of a participant's insolvency.

In order to determine the impact of Proposed Principle 14 on the US-based CCPs in the DTCC group and their participants, DTCC retained a consultant to study the current account structure of the CCPs and discuss with a variety of participants and other parties -- global investment banks, retail brokers, correspondent clearing firms, exchanges, automated trading systems and service bureaus -- how customer positions are currently protected and how they might be protected by being segregated at CCPs. The results of their study are summarized in the Appendix to this letter. Generally, they determined that:

- Even in its simplest form with omnibus customer accounts rather than individual customer accounts, implementing Proposed Principle 14 for US cash market CCPs would require changes in the structure and operation of the US cash markets, and changes in US securities and insolvency laws.

- There would be significant problems differentiating between house and client positions on trade date with respect to margin trades, block trades and trades cleared through clearing brokers.

- There would be significant problems identifying customer collateral because settlement risk collateral is not typically posted directly by the customer with the CCP.

- There would be significant changes required in systems and processes, impacting brokers, trading platforms, service providers, the CCPs and the settlement agents and depositories through which settlement occurs.

Implementing Principle 14 thus would be a complex, expensive, multi-year project, requiring action on the part of not just CCPs but virtually all participants in the US financial markets -- both the participants of CCPs and their customers.

Proposed 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 FMIs critical operations and services over an appropriate time period.

DTCC fully supports Proposed Principle 15 with respect to general business risk and the sufficiency of assets to ensure, under normal circumstances, that the FMI can continue providing services and, in the dire situation where an FMI must be subjected to an orderly wind-down or re-organization, to ensure that critical operations and services can be maintained over an appropriate time period. DTCC believes, however, that it would be helpful to clarify certain language in Key Consideration 2 and the Explanatory Note.

Proposed Principle 15 and the related Key Considerations and Explanatory Note address a class of "general business losses" which is different from the losses that an FMI may experience due to participant default. In Paragraph 3.15.1 of the Explanatory Note, these are described as risks and losses related to administration and operation as a business enterprise, as well as an impaired financial position due to declining revenues or increased expenses, attributable to business deficiencies such as poor execution of strategy, ineffective response to competition, losses in other business lines, changes to the regulatory environment or adverse reputational events. Paragraph 3.15.1 goes on to provide that "[a]n FMI should have robust management and control systems to identify, monitor, and manage its general business risk."

This last sentence is an appropriate statement of policy for any FMI. However, we would note that the existence, nature and degree of "general business risk" may vary radically depending on the structure and market of the FMI, including whether it is a commercial, for-profit operation or an at-cost or low-cost financial market utility. Privately held (including user-owned) FMIs may not have ready access to public markets to raise additional capital but rely primarily on the user/owner community for both adequate capital and adequate financial resources for default coverage. For such FMIs, the sum of general business risk protection and default resources will unavoidably concentrate the FMI's demands on its participants, with potential systemic consequences.

DTCC believes it is critically important to establish a level playing field among FMIs subject to this guidance. To this end, there should be a standard rule for measurement of capital resources to be held under Proposed Principle 15, consistent with the questions posed in the Cover Note:

- What are the pros and cons of establishing a quantitative and/or qualitative requirement for the amount of liquid net assets funded by equity that an FMI should hold to cover general business risk?

- If a quantitative requirement is established, what are the pros and cons of setting this amount equal to six, nine or twelve months of operating expenses?

DTCC understands the terms quantitative and qualitative requirements to refer, respectively, to objective and subjective standards for establishing an amount of liquid net assets funded by equity that an FMI should hold to cover general business risk. Accordingly, DTCC would urge an objective or quantitative requirement such as a period of time and that the appropriate period of time be six months.

Key Consideration 2 provides in part that "[a]n FMI should hold sufficient equity or equity capital, in the form of shareholders' funds (such as common stock, disclosed reserves, or retained earnings), to cover potential general business losses, so that it can continue providing services as a going concern."

Similarly, Paragraph 3.15.6 of the Explanatory Note provides in part that "[e]quity capital in the form of shareholders' funds (such as common stock, disclosed reserves, or retained earnings), allows an FMI to absorb losses on an ongoing basis and should be permanently available for this purpose." DTCC appreciates that the parentheticals in each of Key Consideration 2 and Paragraph 3.15.6 are meant to be illustrative and not prescriptive or limiting. In this spirit, DTCC recommends that what constitutes equity capital should be clarified and broadly construed to include preferred stock and long term subordinated debt which is customarily (or, in some cases, by statute or regulation) treated as the functional equivalent of equity capital. With regard to such debt, it should be treated as "permanently available" if it is sufficiently long term in duration, as provided by the last sentence of Paragraph 3.15.6. DTCC believes that these additional types of liquid assets are equivalent to equity capital for the purposes set forth in Proposed Principle 15, without posing added risks. Such a broad definition of equity capital is especially necessary and important to a low-cost public utility FMI which does not have access to public capital markets to replenish capital but should also permit the use of appropriate instruments for other FMIs as well.

DTCC would further recommend that it may be appropriate to define the amount of equity capital to be held in liquid assets for these purposes by the amount of key operating expenses necessary to the FMI to continue to provide critical services and operations. This limitation to "critical services and operations" reflects that, in a circumstance where a wind-down or reorganization is the projected next step, certain expenses, *e.g.*, start-up expenses and capitalized expenses, strategic initiatives, new product development and marketing expenses, would not be incurred, and that other services ancillary to the FMI's core responsibilities likely would be curtailed quickly. DTCC would suggest that having such an operational definition of the required amount of equity capital accords with the sense of Key Consideration 2 and Paragraph 3.15.6, that liquid net assets should be available for going concern expenses and for wind-down or reorganization.

As regards the amount of equity capital required (whether it should be equivalent to 6, 9 or 12 months of expenses), DTCC supports the maintenance in reserve of six months' equity capital which, as suggested above, should be for the amount of ongoing operating expenses for that length of time. It is our view that six months is more than reasonable because any resolution of an FMI would have to happen quickly; that is, the period during which the FMI might operate subject to a wind-down or reorganization is likely to be less than six months. During that six months, if the FMI is winding down, its expenses should be reducing, so that the six month reserve should be more than sufficient. We believe that the Final Report should clarify that no additional amount may be required for an FMI to be in compliance, although, of course, it may elect to hold more as it may deem necessary, prudent and appropriate.

Proposed Principle 16: Custody and Investment Risk

An FMI should safeguard its assets and minimise the risk of loss or delay in access to those assets, including assets posted by its participants. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

DTCC fully supports Proposed Principle 16.

Proposed 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 fulfillment of the FMI's obligations, including in the event of a wide-scale disruption.

DTCC fully supports Proposed Principle 17 with respect to operational risk, but believes that certain matters in the Explanatory Note should be clarified.

Paragraph 3.17.10 of the Explanatory Note states that FMIs should "continuously" monitor, review and test capacity. We would suggest that, as a practical matter, capacity should be monitored, reviewed and tested "on an ongoing basis"; the word "continuously" suggests a higher level of rigor that seems unnecessary.

Paragraph 3.17.13 of the Explanatory Note generally provides that an FMI should have a second site for its operations, and possibly even a third site depending on the importance and level of interconnectedness of the FMI. The last sentence of this Paragraph states that "an FMI should consider alternative arrangements to allow for the processing of time-critical transactions in the extreme circumstance that none of the FMI's sites are operational." Given the complexity of today's financial markets, it would be difficult, if not impossible, to transition the processing of time-critical transactions to another system in such an extreme circumstance, as this wording seems to imply. We assume that the point is that FMIs may need to consider the creation of additional levels of back-up capabilities that, in such an extreme circumstance, could be implemented to permit the resumption of transaction processing within a reasonably limited period of time. It would be helpful if this could be clarified in the Final Report.

Proposed Principle 18: Access and Participation Requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

DTCC fully supports Proposed Principle 18 with respect to criteria for participation in an FMI, but is concerned with the possible implications of certain language in Key Consideration 1 and the Explanatory Note.

Key Consideration 1 states that "[a]n FMI should allow for fair and open access to its services, including by direct and, where relevant, indirect participants and other FMIs, based on reasonable risk-related participation requirements." The first sentence of Paragraph 3.18.6 of the Explanatory Note states that "[p]articipation requirements, including those applicable to indirect participants, should be justified in terms of safety and efficiency to the system and the broader financial markets."

Key Consideration 1 and the language quoted above from Paragraph 3.18.6 would appear to suggest that an FMI adopt (fair and open) participation requirements for indirect as well as direct participants. See also a similar reference in the second sentence of Paragraph 3.18.1 to "rules governing indirect participation."

DTCC agrees that an FMI should have objective, risk-based and publicly disclosed participation criteria for direct participants, and that such participation criteria should not prevent direct participants from acting for indirect participants (as long as such direct participants meet the requisite criteria to clear for others). It should then be up to such direct participants to establish the requirements for correspondent relationships for their customers, and to properly select and monitor their customers. The responsibility of direct participants in this respect is very well stated in the second sentence of Paragraph 1.25 of the Consultative Report (generally describing indirect participation in FMIs) which provides that "[i]n many cases, the FMI has no contractual or other relationship with an indirect participant, and it is the responsibility of the direct participant to ensure that the FMI is not adversely affected by the indirect participant's behavior."

DTCC would suggest that, in the Final Report, Key Consideration 1 and Paragraphs 3.18.1 and 3.18.6 of the Explanatory Note be revised to be consistent with the position expressed in Paragraph 1.25 of the Consultative Report. A direct participant is in the best position, and has more (and more business-specific) resources and expertise, to establish appropriate indirect participation requirements for its customers (and possibly different indirect participation requirements for different customers) based on its greater familiarity with the business operations and risk profiles of such customers, to monitor and enforce such indirect participation requirements and to otherwise protect itself (and therefore the FMI) from any risk of loss from such customers.

Proposed 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.

As a general matter, most FMIs maintain a principal-to-principal relationship with their participants, but not with the customers of their participants. Accordingly, there are no legal or financial obligations between such FMIs and the customers of their participants and, as a result, the risk of failure of a clearing participant's customers is borne by the clearing participant itself. This structure protects FMIs (and particularly CCPs) from the risk of failure of a participant's customers, and requires clearing participants to carefully and continually assess the counterparty risk they take on from their customers. Proposed Principle 19, together with Proposed Principle 14, and other statements made throughout the Consultative Report, evidence a clear goal to protect the customers of clearing participants against the failure of their correspondent. While we understand and agree with the need to reduce the potential systemic risk from such tiered arrangements, this goal should nevertheless not be achieved by imposing any change or limitation on the principal-to-principal risk structure that many FMIs utilize, which serves as a valuable risk protection to the FMI.

One consequence of this structure is the difficulty of imposing any direct obligation -- reporting or otherwise -- on any indirect participant where there is no contractual privity. Accordingly, any information that an FMI would rely on in evaluating such indirect participant risks would need to be provided either by the clearing participants themselves (who may be resistant to such requests), or the relevant regulators of either the indirect participants or the clearing participants. Moreover, in some markets or countries, where the number of indirect participants may be numerous, any obligation to review the financial or operational condition of indirect participants could be a significant burden on the FMI, both in terms of the necessary additional staffing and time (and potential additional systems) that would be required, and the related costs.

In this regard DTCC seeks clarity as to whether the tiered participation arrangements addressed in Proposed Principle 19 are intended to apply to sub-custodial indirect holding arrangements through CSDs. While the stated scope covers all FMIs, it would appear from the discussion that the types of risks sought to be addressed are primarily those arising in tiered CCP relationships. Otherwise the implication is that CSDs in jurisdictions which follow the indirect holding model could potentially be responsible for oversight of the entire indirect securities holding system.

The Explanatory Note recognizes the legal and practical challenges that FMIs face in identifying and managing the risks that indirect participants present to FMIs, but nevertheless appears to require that FMIs gather certain information about indirect participants (the types of which are specified in Paragraphs 3.19.5 and 3.19.6 as regards information about direct participants' processes for handling a default of one of their customers). The duty to monitor and control risks presented by indirect participants should fall principally on the clearing firm and its regulator as the first line of defense. Given that direct participants are usually regulated financial institutions, DTCC suggests that this is one area where mitigation of

potential risks could be better furthered by greater cooperation between the FMI and the regulators having supervisory authority over its direct participants. This is especially important where a particular FMI may only see transactions relating to a specific market, and not have visibility into the other activities of its participants; the only entity that would have a full overview of the participant's activities and exposures would be its supervisory authority. We believe that including some discussion of the need/importance of a cooperative framework of this type into the Final Report would further this objective.

Finally, given the caveat set forth in Proposed Principle 19 (that an FMI act to achieve the Proposed Principle "to the extent practicable") and the explicit recognition of the legal and practical limitations FMIs face in implementing Proposed Principle 19 (particularly in view of the extensive information required to meet the responsibilities proposed in Paragraphs 3.19.5 and 3.19.6) there needs to be greater clarity as to how an FMI will be objectively assessed for compliance with the Proposed Principle.

Proposed Principle 20: FMI Links

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

DTCC broadly supports Proposed Principle 20 with respect to the identification, monitoring and management of risks related to links between FMIs, but believes that certain matters in the Explanatory Note should be clarified.

Risk Management Frameworks

Paragraph 3.20.1 of the Explanatory Note states in part that:

> . . . an FMI that establishes multiple links should ensure that the risks generated in one link do not spillover and affect the soundness of the other links and FMIs. Mitigation of such spill-over effects may require the use of strong risk-management controls, including additional financial resources, or the harmonisation of risk-management frameworks across FMIs.

Paragraph 3.20.17 of the Explanatory Note also notes that where linked CCPs have materially different risk management frameworks, the linked CCPs should assess the effectiveness of their models and methodologies and consider whether their risk management frameworks should be harmonized, or whether other risk mitigating measures should be taken. It goes further to suggest that "[i]f three or more CCPs are interlinked, the desirability of risk-management issues being addressed using a common risk-management framework is even greater."

The risk systems and methodologies used by FMIs, of course, vary, and it is not at all unusual -- nor is it particularly of concern -- for linked FMIs to use different risk management frameworks. The Explanatory Note correctly suggests that it is key that each linked FMI understand and evaluate the risk management framework of the entity or entities with which it is linked, and adopt appropriate mitigants to address any identified risks.

In this regard, DTCC believes that the suggestion of harmonization (use of "a common risk-management framework") is more (and appropriately) directed at the risk management framework governing the management of inter-CCP risks among CCPs that interlink -- that is, that the framework governing the management of the risks among the linked CCPs should be harmonized and made transparent to all linked CCPs. In peer-to-peer links such arrangements include the basis on which inter-CCP collateral is calculated and collected, the conditions under which one CCP is deemed to be in default, etc., as well as certain processes and procedures such as buy-ins. DTCC fully agrees with such an approach, and notes

that such inter-CCP risk management arrangements could be harmonized even when individual CCPs' risk management frameworks remain independent. We suggest that the Final Report should make more clear that the comments regarding "harmonization" in this context are directed at this "inter-CCP risk management framework." We would also strongly support including in the Final Report a standard that such framework should be made *fully transparent* by all CCPs connected by such links.

Linked CCP Participation Requirements

DTCC also believes that the suggestion in Paragraph 3.20.13 of the Explanatory Note that additional risk may be created when a CCP sets "less strenuous participation requirements for the linked CCP than for other participants" is somewhat contradictory to the position with respect to inter-CCP links taken elsewhere in the Explanatory Note.

Relationships between linked CCPs -- particularly peer-to-peer links -- are typically governed by the agreements establishing the link and the procedures agreed upon between the linked CCPs, rather than by the participant rules and procedures of the linked CCPs. As suggested in Paragraph 3.20.15 of the Explanatory Note, peer-to-peer linked CCPs often do not apply for membership in the other linked CCP, and are not considered members or participants of each other, thus not subject to the same rules and participation requirements.

More generally, CCPs are heavily regulated and are not proprietary risk-taking entities, like banks, investment firms and other CCP participants. Therefore, while alternative risk mitigation measures not applicable to a CCP's participants may be appropriately applied to a linked CCP, certain standard participant requirements may be justifiably waived with respect to a linked CCP, to the extent those requirements are inapplicable to the link relationship, without creating any additional risks.

DTCC would suggest that references akin to the cited passage in Paragraph 3.20.13 should be omitted from the Final Report, since they are simply confusing and contradictory to positions elsewhere in the standards.

Proposed Principle 21: Efficiency and Effectiveness

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

DTCC fully supports Proposed Principle 21 as a reasonable statement of an FMI's responsibility to deliver efficient and effective service to its participants.

Proposed Principle 22: Communications Procedures and Standards

An FMI should use or accommodate the relevant internationally accepted communication procedures and standards in order to facilitate efficient recording, payment, clearing, and settlement across systems.

DTCC fully supports Proposed Principle 22. DTCC believes, however, that it would be helpful to clarify certain language that appears in each of the Key Considerations and in the Explanatory Note.

While we view the wording of Proposed Principle 22 as appropriately balancing the various interests relating to the use of communications procedures and standards, the slightly different wording in each of the Key Considerations -- that an FMI should "use, or at a minimum accommodate" the international standards -- conveys an unfortunate connotation that *accommodating* the standards is less preferable than

using the standards. We would suggest that the Final Report should recognize that accommodation of the standards is as acceptable as mandating their exclusive use.

Many users of FMIs operate across borders and in economic zones with markets evolving toward interoperability. For these users, it is important that FMIs in which they participate (or whose services they use) should use and accommodate international communications standards, so that they can connect with such FMIs in a consistent and standard way. For these users, standardization has the potential to generate operational and cost efficiencies.

Users which process only transactions in a particular market, however, typically rely on long-standing, highly-automated communications methods and messaging formats that are viewed as industry-standard for that market, even though these may not align with international standards (this is the case for US domestic transactions, as an example). These users should not be required to retool their communications with the FMI for that market to comply with international communication standards. Any such requirement may impose substantial costs on those users which would be devoid of any material benefits.

For this reason DTCC believes that the text of Proposed Principle 22 -- rather than the language of the Key Considerations -- correctly provides that both the use or accommodation of relevant international communication standards are equally satisfactory means of addressing this concern. An FMI accommodating the standards can permit those users who wish to use the standards exclusively to do so, without forcing those users who do not wish (and have no need to) use the standards to convert to them. The language of the Final Report should consistently convey that either use or accommodation is acceptable.

Proposed Principle 23: Disclosure of Rules and Key Procedures

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

DTCC broadly supports Proposed Principle 23 with respect to clear and comprehensive rules and procedures and the public disclosure of relevant rules and key procedures, but is concerned with the possible implications of certain language in Key Consideration 2 and the Explanatory Note.

The last two sentences of Paragraph 3.32.4 of the Explanatory Note state that "an FMI is well placed to observe the performance of participants and should promptly identify those participants that do not adequately understand its rules, procedures, and risks of participation. In such cases, an FMI should notify the senior management within the participant institution and, in cases of significant potential risk, notify the appropriate regulatory, supervisory, and oversight authorities." Although an FMI has an obligation to enforce its rules and procedures (which obligation is statutory in the United States), DTCC believes that the responsibilities that Paragraph 3.23.4 would impose on FMIs are inappropriate. DTCC believes that the division of responsibility between an FMI and a participant with respect to the rules, procedures and risks of participating in an FMI are long-established and clear. It is the responsibility of the FMI to develop, disclose and enforce its rules and procedures. It is the responsibility of the participant to know and abide by such rules and procedures, and assess the risks of participating in the FMI. Moreover, there is no way that an FMI can determine whether a participant (or, more particularly, any individual employee of a participant) does or does not adequately "understand" the FMI's rules and procedures or risks of participation. Given this, we believe that the Final Report should reflect this appropriate division of responsibility between the FMI and its participants.

Key Consideration 2 provides that an FMI should disclose (presumably to its participants) clear descriptions of the design and operation of its system, as well as their rights and obligations (presumably as set forth in the rules and procedures of the FMI) but Key Consideration 2 then goes on to provide that an FMI should also disclose the "risks participants incur by participating in the FMI." DTCC agrees that an FMI should disclose to its participants clear descriptions of the design and operation of its system and their rights and obligations as participants. However, based on such information, DTCC believes that participants should then assess for themselves, taking account of their individual circumstances, the "risk [they] incur from participating in the FMI." In other words, it should be the obligation of the FMI to disclose to participants the information participants need to assess their risks of participating in the FMI but it should be the obligation of participants to then assess their risks based on such information. Accordingly, DTCC would suggest that, in Key Consideration 2, the phrase "and risks participants incur by participating in the FMI" be replaced with the phrase "so that participants may assess the risks they incur by participating in the FMI." This formulation of Key Consideration 2 would accord with the formulation of Key Consideration 3, which requires that an FMI provide its participants with the documentation and training, needed to facilitate *their* understanding of, among other things, "the risks they face from participating in the FMI." Along the same lines, DTCC would suggest that:

(a) in the second sentence of Paragraph 3.23.21 of the Explanatory Note, elaborating on Key Consideration 2, the phrase "and the risks of from [sic] participating in the system" be replaced with the phrase "and so that participants may assess the risks of participating in the system"; and

(b) in the third sentence of Paragraph 3.23.2 of the Explanatory Note, the phrase "and risks participants incur by participating in the FMI" should be replaced with the phrase "so that participants may assess the risks they incur by participating in the FMI."

DTCC believes that the proper allocation of responsibility for assessing the risks that participants may incur from participating in an FMI -- the allocation that the foregoing suggested changes would reflect -- is set forth in the first sentence of Paragraph 3.23.4 of the Explanatory Note, elaborating on Key Consideration 3, which states that "the primary responsibility for understanding the rules, procedures, and risks of participating in the FMI rests with participants" but that "the FMI should provide all necessary and appropriate documentation and training to facilitate understanding." It would be helpful to have this approach consistently reflected throughout the discussion in the Final Report.

The fourth sentence of Paragraph 3.23.2 of the Explanatory Note states that the rules and procedures of an FMI "should clearly outline the respective roles of participants and the FMI, as well as the procedures that will be followed in routine and non-routine circumstances." DTCC is concerned that this language might be construed to require that an FMI disclose what actions it might take in "non-routine" circumstances. We do not believe that such disclosure would be appropriate because such circumstances may be unanticipated and therefore would not be the subject of procedures written beforehand, and the management or the board of an FMI usually is given discretion in the rules and procedures of the FMI to deal with such unanticipated circumstances (which is recognized in the following Paragraph 3.23.3 of the Explanatory Note). DTCC believes that to the extent an FMI is required to prepare and publicly disclose what actions it might take in "non-routine" circumstances, such disclosure would limit the flexibility of management or the board to deal with unanticipated circumstances and would restrict the ability of the FMI to take necessary situation-specific action to mitigate risk, and thereby have the effect of increasing risks to the FMI and its participants.

Proposed Principle 24: Disclosure of Market Data

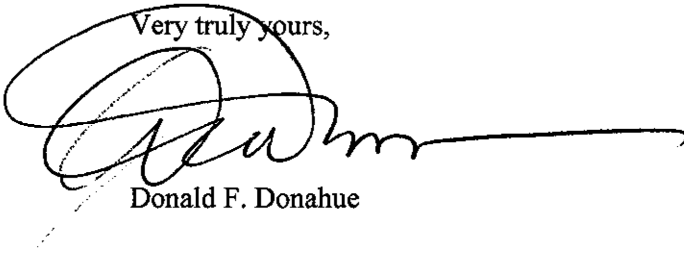
A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

Proposed Principle 24 is discussed in the separate letter that Deriv/SERV is submitting to CPSS and IOSCO with respect to issues of particular concern to Warehouse Trust and Derivatives Repository, the two TRs in the DTCC group.

* * *

DTCC appreciates the opportunity to comment on the Consultative Report and looks forward to working with CPSS and IOSCO and other FMIs in the very important task of developing new international standards for payment, clearing and settlement systems.

Very truly yours,



Donald F. Donahue

Appendix -- Segregation and Portability

While DTCC recognizes that the cash markets may ultimately evolve towards a segregation approach like the current listed derivatives (omnibus) model, so that cash market CCPs could implement arrangements to facilitate the optional segregation and portability of customer positions and collateral, and DTCC would be supportive of such evolution, this would be a significant market-wide multi-year undertaking. The following outlines some of the issues that would need to be addressed before such a project could proceed:

Legal Considerations

The Explanatory Note for Proposed Principle 14 generally recognizes that, to fully achieve the benefits of segregation and portability, the legal framework should support such arrangements. Footnote 90 to Paragraph 3.14.5 (Customer Accounts), in relevant part, provides:

> However, in the case of some CCPs for cash markets, domestic law enables segregation and portability by alternative means. In these jurisdictions, the CCP and relevant authorities should evaluate the extent to which the CCP should revise its operations and adopt rules and procedures that enable segregation and portability in conformity with this principle.

This is the case in the US markets for most types of securities: segregation is supported by Rule 15c-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Rule 15c-3-3 requires brokers to promptly obtain, and maintain possession and control of, "fully paid securities" and "excess margin securities" carried by a broker or dealer for the account of customers. In many cases under this regime, pending securities purchases will not be deemed fully paid customer securities, and in fact would be deemed proprietary or "house" account securities until settlement occurs through the CCP and payment for the securities is received by the broker from the customer.[7] Similarly, if customer securities have a lien on them from the broker and are sold, then if the broker goes into liquidation before the transaction settles, the estate of the broker has a claim on those securities.

In addition, existing Securities Investor Protection Corporation ("SIPC") broker liquidation rules (SIPC Series 300 rules -- Rules Regarding Closeout or Completion of Open Contractual Commitments) provide for closeout or completion of customer contracts, and do not contemplate the transfer of open positions (and any related CCP margin) to another broker. More importantly, under U.S. insolvency rules customer property is required to be distributed ratably to customers on the basis and extent of their net equity claims (11 USC §752).

The US cash markets have developed on the basis of this regulatory regime, and market participants have built systems and processes designed to achieve compliance with these requirements. Broker-dealers utilize two services offered by DTC to assist in complying with their obligations under 15c3-3: DTC's Segregation service and DTC's Memo Segregation service. Where a broker's customer is an institution

[7] Under Rule 15c3-1(c)(9), prompt transmission or delivery of securities is not required to be effected prior to the settlement date of the relevant transaction. Rule 15c-3 does not otherwise specifically address pending transactions or "in flight" securities. Fully paid securities, under Rule 15c3-3(a)(3), are those carried in a cash account under Regulation T of the Board of Governors of the Federal Reserve System and margin equity securities when (under Regulation T) such securities have no loan value on a general account or a special convertible debt security account and they are 'fully paid'. As regards payment for securities carried in cash accounts, section 220.8 of Regulation T provides, in part, that a creditor shall obtain full cash payment for customer purchases within one "payment period" (i.e., T+3, the standard settlement cycle, plus two business days) from the date any "nonexempted" security was purchased.

that uses a third party custodian, segregation is achieved by the broker moving a position on date of settlement from its depository account to the depository account of the customer's custodian bank.[8]

Market Structure and Efficiency Considerations

Proposed Principle 21 (Efficiency and Effectiveness) recognizes that in designing an efficient system, "an FMI should also take into account the practicality and costs for participants, their customers, and other relevant parties (including other FMIs and service providers)." Footnote 128 to Paragraph 3.21.2 of the Explanatory Note for Proposed Principle 21 notes that for a system to be practical for its users, it needs to take into account local market structures. This is particularly important when evaluating Proposed Principle 14 in light of the current structure of the US cash markets, which has developed, in part, based on the US regulatory framework outlined above. Based on feedback from participants, trading platforms and some service providers, the following outlines some of the US cash market practices that would make identification and segregation of customer positions at a cash market CCP complex and difficult:

1. *Problems differentiating between client and house positions on trade date*. As noted above, customers frequently trade on margin, or securities are not paid for until settlement. As such those open positions under current rules would not likely be segregated as customer transactions in order to preserve the broker's lien. From an operational perspective, trade capacity indicators (agency/principal) may thus not be helpful indicators as a means of directing a transaction received by the CCP from a trading platform to either a "house" or "client" clearing account. Similarly executing brokers may or may not (depending on the nature of the transaction and their arrangements with their clearing broker) be deemed a "customer" of the clearing broker, further complicating the determination of what would appropriately be deemed a customer transaction versus a house transaction. In addition, block traded positions may include both proprietary and customer components, the allocations of which are made following trade date.

2. *Settlement risk collateral is typically not posted directly by customer*. In the cash markets, it is standard practice for brokers to post the collateral (clearing fund) due to the CCP to cover settlement risk on behalf of their clients -- regardless of whether the broker is acting in an agent or principal capacity. Under CCP rules they bear the settlement risk as principal, and so they bear the cost of margining (on an omnibus account basis) their positions. We understand that brokers do not currently charge their retail customers directly for the clearing fund posted to NSCC. We also understand that such charges are uncommon in the fixed income markets. If customers post margin with their broker, it is not the same securities or assets posted by the broker at the CCP (which require cash and a portion covered by eligible government/agency securities). As regards large institutional customers, they may be charged margin by their brokers on a net portfolio basis to cover all the exposures the broker has to the client, including any unsettled trade activity cleared at NSCC or FICC, derivative or other trading activity settling otherwise than through a CCP, and any other margin charged the client for its general financing purposes. Accordingly, protection of customer margin collateral would not occur at the CCP -- either customers are not currently margined for settlement risk, or their collateral is determined on a net basis across markets and held at the broker level. Separating out the "CCP" portion of the customer's margin position would actually increase the client's exposure to the broker.

3. *Significant systems changes would be required*. From a trade flow perspective, significant systems changes would need to be made across the trading and settlement process to implement Proposed Principle 14, impacting brokers, trading platforms, service providers, the CCPs themselves, and the settlement agents/depositories through which their settlement occurs. Obviously, the more granular the segregation requirement is made (whether only an omnibus client account would be required, versus the more numerous approaches to classification of customer types, to identification of the ultimate

[8] Portability of customer inventory is facilitated by NSCC's Automated Customer Account Transfer Service.

retail/institutional customer), the more complex the changes required. At the broker participant level, that will involve changes to order management and trading systems (so as to enable the separate identification of customer transactions from proprietary transactions), and changes to their internal reconciliation and settlement processes (including making corresponding changes to their settlement and asset servicing systems and arrangements at the depository). Some firms indicated this could involve up to 70 systems platforms that would be affected. A consulting firm retained by DTCC has estimated that this would require a 3-5 year timeframe across the industry. Moreover, in the US equities markets there are currently approximately 50 exchanges and automated trading platforms; all of them would have to make corresponding changes at the trading platform level to be able to process the separate identification and accurately report the executed transactions to NSCC for trade capture.

4. *CNS works most efficiently with omnibus account structures.* The US market processes massive volumes compared to other markets globally. With respect to equities, NSCC frequently processes 50 million trades (100 million sides) per day, which is 8 to 10 times the combined volume of all European markets. Similarly with respect to fixed income, on an average daily basis, FICC compares and nets over $4 trillion in government securities trading. The netting provided by NSCC's CNS system is a key risk-reducing feature of the US cash markets, and is designed to maximize settlements and minimize fails. Fragmenting this system into multiple house and client structures would reduce netting efficiency, and would likely result in a corresponding increase in fails to deliver (which some firms indicated could increase exponentially the more granular the level of segregation required). This would impact compliance with Rule 204 of Regulation SHO under the Exchange Act. Moreover, the more fragmented the account structure becomes, the more complicated and time consuming the default management process will become.

<u>Margin and close-out considerations</u>

A key assumption of Proposed Principle 14 is that by segregating open customer positions at the CCP, customer portability is facilitated in the event of the participant's (or indirect participant's) failure. As a practical matter, a CCP will be willing to facilitate the movement of customer positions and collateral only so long as the margin collateral related to those -- and other -- positions is accurately ascertainable and adequate, so that the CCP is not under collateralized with respect to the remaining positions for which it is responsible. That would generally only be effective if the customers' positions are margined on a gross basis -- and this would have the effect of undoing the net portfolio margining at the CCP level, and result in large increases in margin, the costs of which would be passed on to the customers. So where segregation at the individual customer level would be prohibitively complex and expensive (as indicated above), segregation on an omnibus customer account level (with margining on the netted omnibus positions) would not appear to facilitate portability unless another participant of the CCP were willing to take over the omnibus account in toto. (This of course presupposes that firms can adequately address the fully-paid for issues outlined above prior to settlement for purposes of identifying what are true customer open positions and enabling the CCP to timely margin them accordingly.)

More critically, it is unclear how portability considerations would factor into a CCP's default procedures, given that closeouts are to be effected as promptly as practicable. A CCP cannot reasonably be expected to pend its closeouts (and risk market deterioration) while customers decide where to move their pending positions.