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Committee on Payment and Settlement Systems  
Bank for International Settlements  
Sent by email to: [cpss@bis.org](mailto:cpss@bis.org)

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Technical Committee  
International Organization of Securities Commissions  
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### **Consultative report ‘Principles for financial market infrastructures’**

Dear Secretariats

This letter contains the response of the International Swaps and Derivatives Association, Inc. (“ISDA”) to the Committee on Payment and Settlement Systems (“CPSS”) and the Technical Committee of the International Organization of Securities Commissions (“IOSCO”) (collectively “CPSS-IOSCO”) consultative report on principles for financial market infrastructures<sup>1</sup> (“FMIs”) of March 2011.

Since 1985, ISDA<sup>2</sup> has worked to make the global over-the-counter (“OTC”) derivatives markets safer and more efficient. Accordingly, this response concentrates on the proposed FMI principles’ application to OTC derivatives markets, and in particular the proposals’ suitability as risk management standards for OTC derivatives CCPs. In relation to the principles’ application to FMIs more broadly and in other financial markets, we endorse what we consider to be complimentary positions outlined in the Global Financial Markets Association (“GFMA”) response to the consultative report.

ISDA commends CPSS-IOSCO for its consideration of the issues raised by the proposed principles. We have a number of comments, welcome the opportunity to share these and look forward to assisting CPSS-IOSCO in implementing appropriate FMI risk management

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<sup>1</sup> FMIs are defined as central counterparties (“CCPs”), central securities depositories, securities settlement systems, trade repositories and for payment systems that are systemically important. CPSS-IOSCO consultative report, ‘Principles for financial market infrastructures’ March 2011, page 5.

<sup>2</sup> ISDA is one of the world’s largest global financial trade associations, with over 800 member institutions from 56 countries on six continents. These members include a broad range of OTC derivatives market participants: global, international and regional banks, asset managers, energy and commodities firms, government and supranational entities, insurers and diversified financial institutions, corporations, law firms, exchanges, clearinghouses and other service providers. Information about ISDA and its activities is available on the association’s web site: [www.isda.org](http://www.isda.org).

standards<sup>3</sup> with a view to enhancing market liquidity, reducing risk and fostering financial stability.

At the outset, we wish to emphasize five overarching concerns.

First, we strongly agree with CPSS-IOSCO that a single set of FMI standards would provide greater consistency in the oversight and regulation of FMIs worldwide. In that regard, the importance of an integrated analysis of the risks and regulation of FMIs and their participants should not be undervalued, recognising that these standards will interact with many other regulatory initiatives, including Basel III. As you know, the Basel Committee on Banking Supervision (“BCBS”) propose that CCPs are “qualifying CCPs” for Basel III exposure purposes *only* if they comply with the CPSS-IOSCO standards (as finalised).<sup>4</sup> Accordingly, it is critical that these standards are developed by CPSS-IOSCO in an active dialogue with the BCBS, the industry, and other stakeholders. Given the global nature of the OTC derivatives market, such coordination is essential to effectively establish international minimum risk management standards, avoid regulatory arbitrage, and mitigate systemic risk and adverse spill-over across countries. Further, we urge CPSS-IOSCO to consider publishing detailed risk management standards for exchanges and multilateral trading systems in the future given the risks these trading infrastructures pose for FMIs and their critical role in the financial system and broader economy.

Liaison with national FMI regulators is also a prerequisite for the construction of an effective harmonized international framework for FMIs. We are concerned about the absence of detail from CPSS-IOSCO in the consultative report on how the proposed principles would interact with other regulatory initiatives impacting on FMIs and/or the derivatives markets, including the United States’ Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”) and the European Union’s Regulation on OTC derivatives, central counterparties and trade repositories (“EMIR”). This is a concern because diverse and inconsistent requirements between different supervisors will increase costs and make it less likely that robust international standards can be developed. Close international cooperation between various supervisory bodies including banks, FMIs, and systemic risk supervisors would mitigate these risks.

Second, while we support the introduction of specific minimum requirements (such as in the credit, liquidity and general business risk principles), it is important that such minimum requirements avoid the suggestion that a simple quantitative standard is a substitute for prudent risk management. Too much focus on a particular number could give rise to inadequate risk management standards where that number is imprudent for a particular FMI given its bespoke risks. Specifying compliance in such a way could also result in FMIs simply adopting the baseline without its own risk management committee and local regulator performing the requisite risk management and supervisory work respectively to determine the

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<sup>3</sup> These standards are expressed by CPSS-IOSCO as broad principles in recognition that FMIs can differ in organisation, function, and design, and that there are often different ways to achieve a particular result. In some cases, the principles also incorporate a specific minimum requirement (such as in the credit, liquidity, and general business risk principles) to apply across FMIs and countries. CPSS-IOSCO consultative report, ‘Principles for financial market infrastructures’ March 2011, page 5.

<sup>4</sup> Refer consultative document published by the BCBS on 20 December 2010, available at <http://www.bis.org/publ/bcbs190.pdf>. “Qualifying CCPs” attract a 2% risk weight for trade exposures, while non-qualifying CCPs attract a 20% risk weight for trade exposures.

appropriate amount of coverage for its market. It could even contribute to destabilizing the FMI. For example, once a large participant of a FMI has defaulted, the adequacy of the FMI's financial resources, based *only* on coverage of one or two defaulting members could result in non-defaulting members losing confidence in the adequacy of the FMI's financial resources to cover further defaults. We believe it is important for FMIs to seek the right balance - maintain a sufficient level of protection from losses due to tail events without imposing liquidity demands on members leading to unnecessary costs, undesirable incentives and/or potential market disruptions. In this regard, we are not convinced that the specific minimum requirements proposed<sup>5</sup> strike the right balance.

We accept the role a simple quantitative standard can have as a "back-stop" standard, but urge CPSS-IOSCO to make this role explicit and to convey the limitations of a back-stop. Again, a rigid quantitative standard is not, and will never be, a substitute for standards based on prudent risk management of the relevant risk factors. Accordingly, it is important that it is not relied on as such.

Third, we strongly urge CPSS-IOSCO to develop principles that address FMI resolution. As an international standard setter, CPSS-IOSCO is uniquely placed to provide needed leadership and clarity on a critical subject, which also has potential cross border aspects. Unfortunately, the consultative report states that "*[it] does not directly address issues relating to the design and implementation of resolution and insolvency regimes for FMIs. This subject is beyond the scope of this report.*"<sup>6</sup> ISDA considers it imperative that principles addressing FMI stress be agreed *ex ante* and that related principles should not be out of scope. Such principles might include consideration of whether there are reliable and timely substitutes with other FMIs. A credible FMI resolution plan is vital for financial stability, particularly given that a FMI disruption might have significant impact on substantial financial markets and a large number of participants. In the absence of adequate crisis management planning, FMI stress might preclude the functioning of a product market and/or threaten the stability and functioning of the global financial system.<sup>7</sup> For example, if a CCP reaches the end of its default resources such that its funds are insufficient to cover losses<sup>8</sup>, Clearing Members ("CMs") should not be legally obligated to make the CCP whole by any means and should be allowed some degree of flexibility, together with the CCP, to work out the precise loss sharing rule and/or CCP re-capitalization mechanism required.

In January 2011 the G14 dealers distributed principles and best practices for managing, in extreme circumstances, the default of a Credit Default Swap CCP.<sup>9</sup> Among other things, the

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<sup>5</sup> Principle 4 and Principle 7 regarding Credit Risk and Liquidity Risk respectively propose that a FMI's credit requirement (or liquidity requirement as the case may be) should be sufficient to cover one or two defaulting participants. In addition, in the "key considerations" of Principle 15, the consultative document proposes that a FMI should hold equity capital equal to six or nine or twelve months of expenses.

<sup>6</sup> CPSS-IOSCO consultative report, 'Principles for financial market infrastructures' March 2011, page 14.

<sup>7</sup> As a related point, CPSS-IOSCO should consider the availability of reliable and timely substitutes in setting the standards for FMI credit risk. If no alternative source is available, it is all the more important that a FMI is highly robust and hence higher requirements may be prudent.

<sup>8</sup> Such losses might arise from, for example, CM default(s) and/or holding of residual open positions of defaulting CM(s) that it is unable to liquidate either by auction or allocation.

<sup>9</sup> CDS Default Management Working Group: Principles and Suggested Best Practices for Managing a Defaulting Clearing Member's Remaining Portfolio and a Shortfall in Available Funds, Draft 14 January 2011

paper suggested that CCP rules, relevant regulations and background law should be aligned to ensure that all parties understand ahead of time how CCP insolvency would be handled. We urge CPSS-IOSCO to consider how elements of the solutions posed might apply more broadly to CCPs clearing other products and asset classes.

Further, in relation to one foreseeable source of potential FMI stress - participant default - the report states that “*An FMI may also decide to auction or allocate open positions to its participants.*”<sup>10</sup> Again, we urge CPSS-IOSCO to provide further guidance. In particular, we consider there should be an explicit principle that a FMI participant’s liability to a FMI is *limited*. Accepting unlimited forced allocation runs counter to a participant’s need to properly measure and control its potential exposure to FMIs and means unlimited liability for each participant to the defaulting participant(s) via the FMI as a conduit. Unlimited liability would preserve the solvency of the FMI at the expense of its participants, a trade-off that may ultimately lead to increased risk to the stability of the financial system. We urge CPSS-IOSCO to adopt principles to introduce a capped liability structure. It is appropriate to cap the exposure of non defaulting participants to both a single default and a series of defaults that occur during a pre-defined number of days, which roll from the day of the most recent default until a full period expires without the occurrence of a default. This aims at capturing all defaults related to one systemic crisis and subject the sequential defaults to the same overall cap. The “period” would be based on risk factors specific to the FMI such as, for example, the type of market served, the nature and size of counterparties and the complexity and liquidity of the products accepted.

Fourth, broadening access to FMIs is a worthy policy position only if the associated risks are addressed to ensure FMI safety is not compromised. For example, if capital requirements for CMs are to be lowered and if CMs are only required to clear risk proportional to their available capital, then CCPs should be required to better understand the risks a CM runs on a real-time basis, so as to have confidence that the CM will be able to meet capital calls (daily pre-funding of client margin, intra-day margin, assessment obligations, etc.) under extreme but plausible market conditions. Compounding this problem will be if such a CM is a member of more than one CCP. While we applaud the open access principle, we advise a FMI to put safety first, as the consultative report explicitly suggests.<sup>11</sup> Open access must go hand in hand with appropriate controls, which can only be achieved once FMIs make appropriate risk management and technology investments.

Finally, while the focus of this letter concerns the suitability of the proposed principles’ application to CCPs, we would also like to comment briefly on trade repositories (“TRs”). TRs do not pose the same concentration of risk as CCPs. However, like CCPs, TRs have recently grown in importance for OTC derivatives markets due to the demands of the G20 commitments.<sup>12</sup> A global TR provides optimal settings for comprehensive trade capture and data access. However, we recognize, for any number of reasons, that local TRs may arise.

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<sup>10</sup> CPSS-IOSCO consultative report, ‘Principles for financial market infrastructures’ March 2011, page 64.

<sup>11</sup> Refer to ‘Key consideration 2 to Principle 18 Access and participation requirements, CPSS-IOSCO consultative report, ‘Principles for financial market infrastructures’ March 2011, page 81.

<sup>12</sup> Paragraph 13 of the “Leaders’ Statement: The Pittsburgh Summit”, available at [www.pittsburghsummit.gov/mediacenter/129639.htm](http://www.pittsburghsummit.gov/mediacenter/129639.htm).

Accordingly, where the development of a local TR is pursued, we urge CPSS-ISOCO to develop detailed standards for TRs that facilitate the development of a “virtual” global TR. This could be achieved by global standards which require TRs to:

- (a) follow global standards of format, data access/infrastructure, and reporting;
- (b) follow global reference standards for product, instrument, client and trade identifiers;
- (c) have capacity to accept trade feeds from other TRs (including global operators) so that market participants can efficiently feed their trade data through one channel where multiple reporting is required;
- (d) be able to process feeds from existing commonly used electronic confirmation platforms; and
- (e) participate in a globally agreed standard for memoranda of understanding which facilitate foreign regulators access to local TRs.

### **Comments on the proposed principles**

The remainder of this letter contains a number of parts covering our comments in relation to the following principles:

- (a) Principle 2: Governance – Composition of Risk Committee
- (b) Principle 4: Credit Risk
- (c) Principle 5: Collateral
- (d) Principle 6: Margin
- (e) Principle 7: Liquidity risk
- (f) Principle 13: Participant-default rule and procedures
- (g) Principle 14: Segregation and portability
- (h) Principle 15: General business risk
- (i) Principle 18: Access and participation requirements
- (j) Principle 19: Tiered participation arrangements
- (k) Principle 20 FMI links
- (l) Principle 23 Disclosure of rules and key procedures

The specific questions posed by CPSS-IOSCO in the cover note to the consultative report<sup>13</sup> are addressed in discussion of the relevant principle.

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<sup>13</sup> IOSCO BN01-11, Cover note to the consultative report, dated 10 March 2011.

*Principle 2: Governance - Composition of Risk Committee:*

The CPSS-IOSCO consultative report states<sup>14</sup>

...an FMI should consider the case for a board risk committee, and a CCP, in particular, is expected to have such a risk committee or its equivalent. A risk committee should be chaired by a sufficiently knowledgeable independent board clearing member and consist of a majority of board clearing members that are independent of management. The committee should also have a clear and public mandate and operating procedures.

We support a framework where the risk committee of a CCP is composed of a majority of CMs whose capital is at risk through loss mutualisation, irrespective of whether CMs have representatives on the CCP's board of directors. In some jurisdictions proposals are being discussed to restrict the representation of CMs on the board of directors. In circumstances where that is the case, CMs should still be able to be represented on a CCP's risk committee. CM representation on a CCP risk committee should constitute more than 50% of the risk committee. In addition, in respect of risk issues directly concerned with protecting the integrity of the financial safeguards (such as, for example, margin, default fund sizing and allocation, assessment rights and default management) that solely those posting money to the default waterfall (usually CMs and the CCP itself) may vote on those issues. On the other issues, such as for example, membership and products to be cleared, all representatives may have a vote.

All risk committee representatives (not only CM representatives) should follow appropriate guidelines and procedures designed to mitigate potential conflicts of interest, including in respect of commercial considerations.

To help ensure an effective risk management structure for the entire market, for-profit CCPs should establish an independent risk committee with CMs constituting a majority of the committee. (While it is understood that such a risk committee could be outvoted by the CCP's board of directors, any such occurrence should be subject to prior regulatory consultation and concurrence.)

In jurisdictions where clients are also exposed to some degree of loss mutualisation, it would be appropriate for clients to be represented in the risk committee, subject to CMs whose capital is at risk having a majority of the votes on the risk committee in any case. Risk committees should not include independent experts or others whose funds are not at risk, since they do not have as strong an incentive to manage risks effectively.

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<sup>14</sup> CPSS-IOSCO consultative report, 'Principles for financial market infrastructures' March 2011, page 27.

*Principle 4: Credit Risk*

CPSS-IOSCO poses two questions on its proposals for managing credit risk.<sup>15</sup> We split the first question into two and our response is set out underneath each question.

1. *What are the pros and cons of establishing for credit risk (1) a “cover one” minimum requirement for all CCPs; (2) a “cover two” minimum requirement for all CCPs; and (3) either a “cover one” or a “cover two” minimum requirement for a particular CCP, depending upon on the risk and other characteristics of the particular products it clears, the markets it serves and the number and type of participants it has?*

As noted above, we are concerned that this question places too much emphasis on the issue of whether there should be a cover *one* or *two* standard. We consider that it is far more important that a FMI’s credit requirement is based on an assessment of the relevant risk factors such as the quality of the counterparties to a given FMI and the products serviced by the FMI. The relative importance of each criterion would vary depending upon the FMI under consideration. Such a risk sensitive assessment could show that even a cover *two* standard was inadequate for a particular FMI’s credit risk. In addition, it is very important that a FMI conducts stress tests and reverse stress tests to measure its credit risk rather than rely on the potentially false comfort provided by compliance with the backstop.

Given the wide spectrum of level/volume of activity, product complexities and CM composition across all asset types and jurisdictions, a single specific coverage level to be adhered to universally will not be appropriate for all CCPs and may have unintended consequences from a risk management perspective in specific markets.

Instead, we would expect the financial safeguard coverage for credit and liquidity risk to be set by a CCP at “N” number of defaults, with “N” being dependent on risk-based factors specific to that market. The “N” coverage number should be subject to annual internal and regulatory review given developments in that particular market/changes in relevant risk factors described below.

In our view, CCPs must engage their key stakeholders: CMs<sup>16</sup> and their respective regulator(s) in seeking the appropriate coverage level, taking into consideration the following risk factors:

- (a) Price volatility of products cleared;
- (b) Liquidation/close out period of products cleared, as well as collateral held, and price transparency – the longer a liquidation period takes, the more risk is mutualised which could result in greater risk of subsequent CM defaults and the longer CM liabilities remain uncertain;
- (c) Correlation of default probability amongst CMs - higher correlation should result in a greater number of CM defaults being covered;

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<sup>15</sup> IOSCO BN01-11, Cover note to the consultative report dated 10 March 2011, page 2 and 3.

<sup>16</sup> CMs have capital at risk through loss mutualisation.

- (d) Correlation of CMs, products cleared, and collateral held – higher correlation should also result in greater coverage;
- (e) Concentration of risk shared by few CMs or risk more dispersed among CM population; and
- (f) Concentration of contracts/positions at aggregate CCP level.

That said, as a backstop we consider that a more than “cover one” safety standard is appropriate with the further coverage level depending on a risk sensitive analysis, as::

- (a) In the event of a large CM default where the CCP only has the level of financial resources sufficient to enable it to withstand that default, non-defaulting CMs may consider that the CCP’s financial resources are largely “used up” and lose confidence in the CCP to the detriment of a stable and orderly market in the product.
- (b) Given that different CCPs are clearing different swap products, a large CM of one CCP is highly likely to be a CM of another CCP. As a result, a single CM default could have implications for multiple CCPs and consequently multiple markets.

In addition, and as discussed further in our response to Principle 18, we would suggest that CCPs and local supervisors evaluate the potential impact of multiple assessments from different CCPs on the same CMs (or affiliates of the CM group) in a short time-frame, and in conjunction with the relevant prudential regulator for such institutions, monitor the ability of participants and its related affiliates to meet these potential exposures as part of its on-going oversight function.

2. *What potential risk, competitiveness or other concerns might arise if certain CCPs that clear certain products would be subject to a “cover one” minimum requirement, while certain other CCPs that clear certain other products would be subject to a “cover two” minimum requirement? How and to what extent could these concerns be addressed?*

First, given the BCBS proposal that “qualifying CCP” status depends on compliance with these CPSS-IOSCO principles, there is the risk that breach of a known number standard (either “cover one” or “cover two”) could result in a sudden change in capital requirements. Such a sudden change gives rise to serious concerns about the competitive settings among market participants and CCPs, and the potential disruption caused by the determination itself that the CCP is in breach. Accordingly, we strongly urge CPSS-IOSCO to work with the BCBS to consider the benefits of a “transition period” to the relevant capital treatment necessary when breach of the cover standard occurs. In addition, regardless of a CCP’s required level of financial resources, we suggest that the CCP should be permitted a restricted period to recapitalize to the minimum level (for example, following a CM default) with the duration of this period to be determined by the CCP’s local supervisor. (Again, the appropriateness and duration of any such period will likely be impacted by the attributes of the FMI, the product being serviced, its membership, and other similar criteria.)

Second, consistent with our response above, we consider the cover standard should be based on an assessment of relevant risk factors, including the quality of the



counterparties to a given CCP and the products serviced by the CCP. Such an approach will determine a standard that is appropriate for a CCP and avoid overly loose regulation given the risks and overly restrictive regulation where it is not warranted.

3. *Which risk and other characteristics of the products cleared by a CCP are relevant in weighing the pros and cons of a “cover one” versus a “cover two” minimum credit requirement for a CCP? In particular, to what extent are any or all of the following product and market characteristics relevant: OTC versus exchange-traded; mandatory versus voluntary clearing; “cash” versus “derivative”; the duration, volatility and degree of leverage; the number and type of CCP participants; the degree of market concentration; and the availability and reliability of prices from continuous, transparent and liquid markets?*

As above, we do not consider that there should be differential *minimum* credit standards for different CCPs. Instead, we urge the CPSS-IOSCO to implement a uniform minimum standard as a back-stop and then “scale” the financial resources required by the CCP based on relevant risk factors such as, for example, the characteristics of the products cleared by the CCP. Indeed, we consider that most of the factors identified in the question are relevant to the minimum credit requirement of a CCP.

*Principle 5: Collateral*

First, it is crucial that CCPs have the ability to value and assess the collateral needed to cover CM exposure. If CCPs seek too much collateral, there are unwarranted costs in using financial products and the risks associated with the increased liquidity drain. Alternatively, if not enough collateral is sought, this adds to the risk concentration at the CCP and acts to incentivize CM's to clear more given that losses will be mutualized and a potential adverse selection correlation for the CCP requiring less collateral.

The G20 commitment to more clearing in OTC markets and related national legislation and implementing rules creates a major business opportunity for CCPs. It is also clear that the strong network effects for CCPs (value to a user is greatly increased by the access that is given to a wide range of counterparties and exposure netting benefits) mean that it is likely that there will be only a small number of winners in each asset class, perhaps only one. However, to the extent that competition does take place for a period, there are two obvious ways for CCPs to compete: lower initial margin, and accepting a wider range of collateral with lower haircuts. From a risk management perspective, both of these actions are undesirable.

If CMs (or clients of CMs) post margin in assets other than cash, the CCP can become under-margined due to changes in the value of the collateral. The risk of this under-margining depends on the volatility of the price of the collateral: the greater the volatility, the greater the risk of under-margining. It also depends on the correlation between the value of the collateral and the value of the collateralized positions. If the assets posted as collateral tend to decline in value when the associated position loses money, the risk of under-collateralization is greater. The risk also depends on the liquidity of the collateral. A CCP runs the risk of forcing down the price of collateral when it sells it to cover a defaulter's obligations: this risk is greater, the less liquid the collateral.

Accordingly, broadly speaking, we consider that the set of "eligible collateral" should be limited to containing assets with the following features:

- (a) high credit quality;
- (b) high liquidity;
- (c) low volatility; and
- (d) have low correlation with the exposure.

Collateral with these features, along with minimum cash thresholds and concentration limits by instrument, would help ensure both adequate liquidity and loss coverage at the CCP in the event of a CM default.

Examples of assets that have the above features include:

- (a) cash in the currency in which the trades are settled or other G4 currency<sup>17</sup>; and

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<sup>17</sup> US Dollar, Euro, Japanese Yen, and British Pound

- (b) direct obligations of, or obligations guaranteed by the sovereign of the jurisdiction in which the CCP resides or other highly-rated sovereigns, i.e. A or above. (This would further include senior debt of certain government-sponsored entities assuming it met objective parameters noted above.)

It is also important to acknowledge the significant liquidity reduction in certain non-cash assets if eligible collateral for every CCP was limited strictly to those non-cash assets listed in category (b) above. Such liquidity strain may be further exacerbated by the competing and similar uses for such collateral pursuant to the rules for uncleared swap margin rules proposed in the United States and European Union and the Basel III reforms (including, notably, the Basel III liquidity ratio). Certain CCPs also accept other non-cash assets with meaningful haircuts (for example, gold). Accordingly, expansion of eligible collateral types is an area that warrants further discussion so long as it is done in a risk appropriate manner subject to regulatory approval.

*Wrong-way collateral risk:* In addition to the concerns noted by CPSS-IOSCO in the consultation document, CCPs should avoid unintended and undesirable negative results of wrong-way correlation between a portfolio and collateral assets (namely where the collateral value declines when the counterparty owes more money meaning different risk factors are correlated in the most harmful direction). Accordingly, CCP stress testing should include a stress for wrong-way collateral risk to discourage CMs from pledging wrong-way correlated (yet eligible) assets to meet margin requirements. For example, there are wrong-way risk implications of posting a corporate bond as collateral against a Credit Default Swap (“CDS”) on a highly correlated underlying. Banks are subject to strict supervision to control wrong way risk in the Basel framework and we urge CPSS-IOSCO to consider similar restrictions for CCPs.

*No rehypothecation:* The trouble with any CCP right of rehypothecation for securities collateral received from CMs is that the securities assets become the assets of the CCP and will be tied into the CCP's insolvency. As a result, a CM would not own its own initial margin, which will form part of the CCP's estate, and in insolvency the CM will just rank as an unsecured creditor. The only way a CM can protect its initial margin completely is to have it post it under a security interest with no rights of rehypothecation at all.<sup>18</sup> The safety of CMs' margin is sufficiently important so that the CCP should not be able to rehypothecate securities assets of the CM. Indeed, such a right of rehypothecation is a tail risk to CM which could itself lead to more defaults.

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<sup>18</sup> For the avoidance of doubt, this excludes the rights a CCP would have in its default rules to risk-manage a defaulting CM's initial margin.

### *Principle 6: Margin*

Margin, especially initial margin, plays a crucial role in absorbing the losses a CCP might incur in liquidating the portfolio of a defaulting CM. Indeed, in a default context, the largest proportion of the financial resources available to the CCP will be initial margin and default funding. Risk is mutualized in the default fund. If initial margin is not sufficient to cover the losses from disposing of a CM's position, the CCP will turn first to the defaulting CM's default fund and then to a combination of the CCP's own capital and the default funding provided by the other CMs. If initial margin is set too low, there will be an incentive to push volume through the CCP as participants recognize that the risk of large volumes will be subsidized by CMs through default fund contributions. Thus, inadequate initial margins may deter prudent firms from becoming CMs.

Moreover, inadequate initial margin will require an increase in the default fund in order to ensure adequate overall financial safeguards. An oversized default fund will negatively impact post-default portability of clearing customer positions, as it will disincentivize non-defaulting CMs from accepting the transfer of the defaulting CM's customer positions given the substantial funding costs, including the costs of maintaining contingent liquidity to facilitate the increase in default fund contributions after porting. Note that these costs will be borne by non-defaulting CMs when distressed market conditions may be otherwise incentivising CMs to maximise their own liquidity.

It is vital that CCPs be required to design default fund calculation processes in a manner that is both transparent and replicable by CMs, so that the requirements resulting from client clearing activity are ascertainable in advance by market participants. In particular, it will be difficult for CMs to provide scalable OTC clearing services if they are unable to ascertain funding costs and mutualised risk potential due to opaque default fund structures.

The approach to ring-fencing client collateral will also have implications for margin. In an omnibus account, the CM will post margin to the CCP for a group of clients on an aggregate basis, and it is possible members of such an account could be exposed to loss if the CM and one or more of the CM's clients defaults simultaneously. If the initial margin held by the CCP is not sufficient to pay for the defaulted positions to be exited or hedged, the CCP may be entitled to make up the shortfall by taking margin out of the CM's omnibus client account – in other words, by taking the initial margin of the non-defaulting clients (client mutualization). However, in the case of individualized client accounts when a CM default occurs with a client default, the CCP would look at the underlying client accounts to identify where the margin shortfall occurs. The CM's still-solvent clients have the value of their collateral protected, leaving the CCP with, relative to the omnibus client account, a shortfall.

In light of the above paragraphs, margins should be set at a level that ensures that customers of CMs should post sufficient margin to CMs to cover loss-on-default under extreme but plausible market conditions and CMs should post margin to CCPs that, together with their default fund contributions, covers their loss-on-default under extreme-but-plausible market conditions. Accordingly, initial margin requirements must consider:

- (a) *Confidence level*: The calculation of initial margin must ensure a safety standard that is “robust”, which should mean in this context that an exception should not occur on average more than once a year. This entails a confidence level that is greater than 99% and assumes an appropriate holding period is applied for that asset class.

Another factor affecting the appropriateness of a given confidence level is the level of mutualization. Currently, mutualization exists for CMs in the CCP default fund and, with respect to the traditional futures (FCM) model, for clients via omnibus client accounts<sup>19</sup>. If these levels of mutualization are removed, for example by a requirement to have individualized client accounts instead of an omnibus account, then an appropriate confidence level ought to be higher than 99%, since the funds available to a CCP to manage a client account default will be greatly reduced.

In addition, given that quiet market periods can produce imprudently low estimates of margin under a confidence-interval-based calculation, we further recommend that minimum standards for the period of data used in margin calculations are set and that these calculations are validated with respect to stressed market conditions.

- (b) *Holding period*: The required holding period should be based on a prudent estimate of the actual time it takes a CCP to liquidate a particular portfolio. This will depend in part on the characteristics of the relevant financial products and the market that it trades in (e.g., liquidity levels) and also the default procedures surrounding the liquidation of such swaps and how well-established they are (e.g., a CCP may have detailed default plans that have been put through several practical tests that demonstrate the relevant portfolio of swaps can be liquidated in a very short time). This approach recognizes that the margin levels will only be as adequate as the CCP's ability to execute the transactions by means of which it liquidates the defaulting CM's portfolio. In this context, please consider our response to Principle 13, which are linked to the calculation of holding period.

CCPs should continually monitor the risk associated with concentration in CMs' positions. If a CCP determines that a participant's cleared portfolio is so large that it could not be liquidated within the liquidation period assumed in the CCP's default management plan, then the CCP should have discretion to include an extra charge for concentration risk in the initial margin requirements of such CM.

- (c) *Wrong way risk*: As noted by CPSS-IOSCO<sup>20</sup>, in calculating initial margin, a CCP should collect additional initial margin to cover any exposure that could give rise to general wrong-way risk, in which the exposure to a counterparty is likely to increase when the creditworthiness of that counterparty is deteriorating. CCPs must charge those less-capitalized members additional margin at extreme-but-plausible levels for clearing any risk beyond the level that such CM's available capital can support.

In addition, a CCP should identify and mitigate any exposure that may give rise to specific wrong-way risk, where the value of a cleared product is likely to fall specifically because the creditworthiness of that counterparty is deteriorating. For example, CMs in a CCP clearing CDS should not be allowed to clear single-name CDS on their own name or their legal affiliates. In addition, CCP's should note the adverse correlation risk that arises from a CM selling protection on the sovereign in which it is domiciled or selling protection on a CDS index which includes itself or an affiliate. A CCP should be required to review regularly its portfolio in order to identify and mitigate promptly any exposures that give rise to specific wrong-way risk

<sup>19</sup> As noted previously, this is applicable only if a client and the CM default simultaneously.

<sup>20</sup> CPSS-IOSCO consultative report, 'Principles for financial market infrastructures' March 2011, page 43.

and to monitor and measure exposures that give rise to general wrong-way risk. A wrong way risk methodology needs to address both measurement and thresholds with corresponding incremental margin charges paid by CMs exceeding them.

In addition, there must be regular CCP back-testing of its initial margin calculation and periodic disclosure by the CCP to its CMs and regulators of its back-testing methodology, its stress tests and results.

We further view the relevant local CCP supervisors as having responsibility for periodically reviewing the stress test methodology and, if appropriate, requiring changes.

We accept that a CCP must have discretion in determining the methodology it uses to make the calculation to comply with the requirements as this will enable the margin to be tailored to the specific business of a particular CCP. This is important as the exposures of one CCP, which clears product "A" are likely to be different than another CCP which clears product "B". Self-certification of compliance with margin calculations is not adequate.

*Principle 7: Liquidity Risk*

CPSS-IOSCO poses two questions on its proposals for managing liquidity risk<sup>21</sup>. We split the first question into two and our response is set out underneath each question.

1. *What are the pros and cons of establishing for liquidity risk (1) a “cover one” minimum requirement for all FMIs; (2) a “cover two” minimum requirement for all FMIs; and (3) either a “cover one” or a “cover two” minimum requirement for a particular FMI, depending on the risk and other characteristics of the particular payment obligations it settles, the products it clears, the markets it serves and the number and type of participants it has?*

The liquidity of the financial resources available to FMIs is critical. If a FMI does not have adequate liquid resources to manage the default of a large participant then any request for further contributions from participants will be a further liquidity drain on the system and may exacerbate the crisis by causing cascading defaults in other (otherwise solvent) participants. Further, the FMI’s local supervisor should make the relevant assessment of the liquidity of the FMI’s financial assets as self-assessment may give rise to an imprudent incentive structure.

For further comment, please refer to our answer to question 1 in the response to Principle 4.

2. *What potential risk, competitiveness or other concerns might arise if certain FMIs that settle certain payment obligations or that clear certain products would be subject to a “cover one” minimum requirement, while certain other FMIs that settle certain other payment obligations or that clear certain other products would be subject to a “cover two” minimum requirement? How and to what extent could these concerns be addressed?*

Please refer to our answer to question 2 in the response to Principle 4.

3. *Which risk and other characteristics of the products cleared by a CCP are relevant in weighing the pros and cons of a “cover one” versus a “cover two” minimum liquidity requirement for a CCP? In particular, to what extent are any or all of the following risk and other characteristics of the payment obligations settled or the products cleared by an FMI relevant: OTC versus exchange-traded; mandatory versus voluntary clearing; “cash” versus “derivative”; the duration, volatility and degree of leverage; the number and type of CCP participants; the degree of market concentration; and the availability and reliability of prices from continuous, transparent and liquid markets?*

Please refer to our answer to question 3 in the response to Principle 4

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<sup>21</sup> IOSCO BN01-11, Cover note to the consultative report dated 10 March 2011, page 3 and 4.

*Principle 13: Participant-default rule and procedures*

First, we note that the imposition of unlimited or unknown/unquantifiable liability on the part of CMs may exacerbate systemic risks significantly and should be avoided, if not prohibited.

Second, entities which become CMs must have the ability to participate in the CCP default management process (either directly or through an affiliate) including the ability to bid for the portfolios of other CMs of the CCP. (The clearing of very complex and illiquid products poses significant risk to a CCP and is not recommended. However, in the event such products are cleared, CMs must have the ability to bid for other CM portfolios including the complex and illiquid products.<sup>22</sup>) Prudent CCP risk management should begin with stringent requirements to become a CM in terms of default risk management capacity in addition to other important entry criteria such as, for example, financial resources. If a CCP admitted a CM (or a group of CMs) that was unable to participate fully in default management, there could be significant negative repercussions for the CCP and for the market. In particular, the unexpected failure of one or more CMs to participate in default management at a moment of severe stress for the CCP would reduce available resources and liquidity, place heightened burdens on other CMs, and reduce the likelihood that the CCP's risk management process would be effective. Moreover, for there to be the right level of incentives for active participation in default management, there needs to be enough 'skin in the game', which suggests not only that the default fund needs to be allocated proportionally to risk introduced; but also that the default fund to initial margin ratio should reflect the estimated percentage of market risk remaining following the completion of the default management hedging phase.

As an additional and related point, default management is too critical for CMs to outsource to unaffiliated third parties. Such outsourcing arrangements may not be sufficiently reliable in times of stress and should not be depended on, particularly in light of the systemic risk issues that may arise if the default management obligations of multiple CMs across multiple CCPs are outsourced to a handful of entities. In addition, there could be conflict of interest issues, since the unaffiliated third party would not have "skin in the game." As a result, through the actions of the unaffiliated third party a CM could be assigned an unsuitable part of a defaulting CM's propriety portfolio and/or at a sub-optimal valuation and/or wrongly accept customer positions from the defaulting CM. This conflict of interest concern is exacerbated where the entity to whom the default management obligations are outsourced to is a "competing" CM in the same CCP.

Third, in addition to written documents and procedures we consider that it is critical that a CCP and its CMs have adequate practical risk management capability and expertise. In that regard, CCPs should have detailed default plans and test them regularly in order to demonstrate the time in which the relevant portfolio of swaps can be liquidated. Results of these tests should feed into the CCP's initial margin methodology. Regulators should have view of, and sign off on the default management plan and tests. Further, CCPs should continually monitor the risk associated with concentration in CMs' positions. If a CCP determines that a participant's cleared portfolio is so large that it could not be liquidated within the liquidation period assumed in the CCP default management plan, then the CCP

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<sup>22</sup> TAs an aside, we note that the data in a TR provides valuable information to regulators that should be thoroughly analysed prior to making any determination about the suitability of different OTC derivative products for mandatory clearing.



should have discretion to include an extra charge for concentration risk in the initial margin requirements of such CM.

*Principle 14: Segregation and portability*

CPSS-IOSCO poses five questions on its proposals for segregation and portability<sup>23</sup>. Our response is set out underneath each question. Following this, we ask for clarification in relation to a CPSS-IOSCO comment regarding individual customer account segregation.

1. *What are the different models and approaches to establishing segregation and portability? What are their pros and cons respectively, for example in terms of efficiency and level of protection that can be achieved?*

We welcome flexibility in relation to segregation and portability.

Broadly speaking, there are two major client clearing models: where the CM is acting as a principal (i.e., trades directly with the client and does a mirror/offsetting trade with the CCP) and where the CM is acting as agent (i.e., a contract between the CCP and the client exists via the agency). However, underneath these two client clearing models, there are many different segregation and portability models possible reflecting the many differences in relevant CCP offerings and rules, local law and regulatory practice.

In US exchange-traded futures CCPs, member and customer collateral are held in segregated accounts, but all customer collateral is co-mingled in an omnibus account. If a customer defaults, resulting in its CM defaulting, non-defaulting customers of such a CM are at risk to having the CCP utilize the monies in the omnibus account to deal with all losses arising from the CM's default.

This risk can be eliminated by segregating initial margin at the customer level, with each individual customer's margin being held in separate accounts. However, regardless of which form of customer segregation is used, if these segregated accounts are held at the CCP, these monies may be at risk in the event of a CCP bankruptcy. That is, they may become part of the CCP's bankruptcy estate. Even if the client(s) eventually recovers these funds, this may take some time and considerable legal expense. This risk can be eliminated by holding collateral in bankruptcy remote accounts.

The degree of segregation has a variety of cost, distributive, and incentive effects. Finer segregation is more costly from an operational perspective. Moreover, bankruptcy remote segregation typically requires the payment of additional fees. In terms of distributive effects, this omnibus segregation exposes customers of a CM to the default risk of other customers. This tends to spread risk from those with a relatively high likelihood of default to those with a relatively low risk. This explains why high credit quality institutions, like some money managers and pension funds, prefer individual segregation to omnibus customer accounts.

However, such segregation effectively transfers the risk of customer default (joint with a CM default) to other CMs via the default fund. Thus, greater segregation typically requires greater CM capital contributions because they bear more risk via the default fund, and/or greater initial margins in order to reduce the risk passed onto

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<sup>23</sup> IOSCO BN01-11, Cover note to the consultative report dated 10 March 2011, page 4 and 5.

default fund contributors. In other words, there are no free lunches with segregation: each structure determines who pays for customer default risk, and how they pay for it.

The allocation of customer default risk among a CM's non-defaulting customers, affects the incentives of customers to monitor the firms through which they clear and depends on the model of segregation. A customer whose margins are segregated has no incentive to monitor its CM risk, or the care that the CM takes to monitor and control the counterparty risks brought by its customers. Thus, greater segregation tends to lead to less monitoring, and accordingly greater customer default losses because risks are commensurately greater with lower monitoring. That is, greater segregation creates a moral hazard. This is a real cost of greater segregation.

2. *In view of the different options and models that may exist, is there any one option or model in particular that could usefully serve as a minimum requirement? Would it be possible to identify a specific approach to segregation and portability that could be defined as best practice?*

Firstly, we do not consider that CPSS-IOSCO should set a particular model as a minimum requirement. There is a strong argument to be made for permitting market participants to contract on segregation and portability, as opposed to prescribing a method via regulation. One possibility would be to establish omnibus segregation as a default standard, but permit clearing members and their clients to negotiate to create individually segregated accounts to contract around the standard. This would permit those who value segregation more highly than it costs CMs to segregate to negotiate mutually beneficial arrangements with CMs. Such contracts would reflect information available only to the contracting parties, but which regulators could not know when setting a one-size-fits-all standard.

Secondly, given the difficulties in establishing whether segregation or portability is effective, we consider that it is preferable for CPSS-IOSCO to set clearer criteria (presumably related to certain customer protection objectives) against which particular models can be assessed

3. *Would it be helpful to distinguish between different types of customers, such as by the degree of tiering or by domestic or cross-border activity? Please explain.*

No.

4. *Would it be helpful to distinguish between different types of products? If so, please explain why and how.*

No.

5. *What are the existing legal constraints that limit segregation and portability?*

Effective segregation and portability is a question of fact and law based on the circumstances. There are many different ways that margin can be segregated depending on how the margin is posted and held and the segregation in place in a given situation. This is critical in relation to whether customer positions and related margin are likely to be successfully ported.

One variable in margin posting is whether a CCP collects margin from CMs on a gross basis (i.e. the CCP collects from each CM margin to the same value as margin posted to the CM by the CM's customers on account of CCP-imposed margin requirements) or on a net basis (i.e. the CCP collects from each CM a level of margin sufficient to account for the net risk to the CCP of the combined customers' positions, with offsetting customer positions resulting in a corresponding reduction in the aggregate margin requirement).

An important consideration in how margin is held is the degree to which the margin is commingled with other assets and where the margin is held. Customer assets may be comingled with the CM's proprietary assets or segregated from the CM's proprietary assets in an omnibus or on an individual client basis. Margin may be held at the CCP (in the client's name or in the CM's name), at the CM, or at a third-party custodian. In a situation where margin is posted by the client on a gross basis, but collected by the CCP on a net basis, it is possible that client margin is held at both the CCP and the CM.

Importantly, the legal consequences of these matters differ and depend on the jurisdiction in question. For example, we understand that French law requires customers who have deposited margin (whether via security interest or title transfer) with the French CM to share in any shortfall on a pro rata basis with all other unsecured claimants of the French CM. In other words, the existence of assertable legal rights by a client does not remove the considerable uncertainty regarding portability of positions and related margin, due to the differing insolvency rules in different jurisdictions.

Accordingly, we urge CPSS-IOSCO to consult national supervisors to determine whether its objectives for segregation and portability are achieved. Defining these and related concepts (such as "bankruptcy remoteness") further may not be practicable given CCP and legal regime/jurisdiction variations.

*Individual Customer Account Segregation:* Given the potential significance of "reasonable cost" used in paragraph 3.14.10 of the explanatory note to segregation and portability<sup>24</sup>, further clarity on the precise meaning is appropriate.

*Guaranteed Portability:* Currently there is no common market practice what conditions have to be met for portability to be deemed as guaranteed. We believe that an offer of portability cannot be just a loose indication of intent, but that such an offer must be a binding agreement stating exactly the amount and type of transactions and up to what initial margin the offeror would accept a client portfolio in case of default of the client's existing clearers. This is especially important as guaranteed portability is one of the factors driving the capital treatment of a clearing client, and regulators should work together to come to a common set of criteria for guaranteed portability, both operational and in respect of the capital treatment.

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<sup>24</sup> CPSS-IOSCO consultative report, 'Principles for financial market infrastructures' March 2011, page 69.

*Principle 15: General business risk*

A CCP should hold substantial equity capital sufficient to cover its operating costs and likely exit costs during its own liquidation. This capital should be separate from any CCP equity contribution to the required default resources. Thus, if defaults exhaust a CCP's default-related resources and the CCP is unable or unwilling to recapitalize itself on a timely basis, then it must in addition have sufficient resources to permit an orderly wind-down of its business.

CPSS-IOSCO poses two questions on its proposals for general business risk.<sup>25</sup> Our response is set out underneath each question.

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

Consistent with our previous comments, we think that a quantitative requirement, *by itself*, is suboptimal. The proposed standard is not risk sensitive as it does not reflect the risks of a particular FMI. In addition, a simple quantitative standard does not operate to incentivise the FMI to develop risk management expertise as the FMI is simply required to have the specified amount of assets. Finally, it may produce destabilising effects if participants lose confidence in the quantum of resources to manage risk whenever the specified amount is not maintained by the FMI.

As an alternative approach, we urge CPSS-IOSCO to consider using the twelve months of operating expenses in *stressed* conditions as a backstop where further amounts of liquid assets may be required following an assessment of the risks in light of the qualitative and quantitative factors listed below. While there should be no "one-size-fits-all" approach, all criteria should be used to measure each FMI under consideration, with the relative importance of each criterion varying depending on the FMI under consideration.

Risk factors:

- (a) Type of market served by FMI;
  - (b) Nature and size of counterparties of FMI;
  - (c) Complexity and liquidity of the products accepted by FMI;
  - (d) Level of interdependence of an FMI and its participants;
  - (e) The availability of substitute services;
  - (f) Potential impact of an FMI's disruption on markets, households and the financial system.
2. *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?*

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<sup>25</sup> IOSCO BN01-11, Cover note to the consultative report dated 10 March 2011, page 5.

See above. Given the potential importance of a FMI to a financial market and/or financial system, and that a FMI cannot use margin or default fund contributions to absorb operational losses (as opposed to losses resulting from a participant(s) default), we believe an amount equal to twelve months of operating expenses in stressed conditions is prudent.

*Principle 18: Access and participation requirements*

We think that broadening access to central clearing is a worthy policy position as long as the associated risks are addressed to ensure that the potential benefits of broader access are realized and the substantial risks of central clearing in financial markets are not significantly exacerbated. Safety should not be a trade-off for access. In this regard, we urge CPSS-IOSCO the Commission to consider the importance of the following:

*Call risk*

CMs generally participate in numerous CCPs and product markets. Consequently, it is very important that regulators and CCPs are able to discover and manage capital “call risk” arising from the possibility that an entity is a CM in multiple CCPs. For example, it is possible that a minimum net worth standard is used repeatedly by a CM to meet the eligibility requirements of multiple CCPs. Consequently, there is a risk of inadequacy in a CM’s capital cover for all of the CCPs at which it is a member in light of the potential impact of multiple assessments from different CCPs on the same CM or affiliate group in a short time-frame. We believe this circumstance to be a significant possibility given the relatively small number of transactors in the OTC derivatives market and the high likelihood that most CMs will be members of multiple CCPs. Left unmanaged call risk poses a serious threat to CCP risk management.

We think that prudent management of call risk requires:

- (a) daily reporting from the CM of their capital cover for the potentially numerous CCP assessments that it could be subject to from each CCP at which the CM is a member;
- (b) the CM to conduct regular stress tests at an ‘extreme but plausible’ market level in relation to the potentially numerous CCP assessments that it could be subject to, and to provide the results to the CCPs it is a CM at; and
- (c) each CCP to monitor and assess, on a daily basis, the ability of a CM and its related affiliates to meet these potential assessment exposures and share this daily analysis with other CCPs and the relevant prudential regulator(s).

Unless regulators and CCPs are able and willing to monitor a CM's assessment liability across all the CCPs at which it is a member and to ensure that such total liability is not excessive, we think that a significantly larger minimum capital requirement that comfortably covers all potential assessments for CMs remains appropriate. At this larger minimum capital requirement size, there would be less of a need for this on-going regulatory scrutiny to address call risk across CCPs as much larger CMs are able to absorb these potential assessment costs whereas small CMs are more leveraged entities in the sense that the sum of their potential CCP assessment liabilities will be a larger number relative to their capital base.

Further, it is important to emphasize that it is not just clearing that causes capital risk for CMs. This is particularly so for non-bank CMs not subject to Basel rules which require regulatory capital buffers.

*Hold capital proportional to risk*

In addition to the minimum capital requirements for an entity to become eligible for being a CM, supervisors should also require CCPs to “scale” a CM’s participation depending on the CM’s amount of capital. In other words, a CCP should be required to establish and enforce

written policies and procedures designed to, amongst other things, make any net capital requirements of CMs scalable so that the capital requirements are proportional to the risks posed by the CM's activities to the CCP.



*Principle 19: Tiered participation arrangements*

We consider it is the role of direct participants to manage the risks of their indirect participants.

The CPSS-IOSCO proposals involve a FMI in monitoring and assessing “indirect participants”, which we could include end-users and brokers which themselves are not CMs and so in turn are party to terms with a CM(s). While this expansion of oversight may provide benefits, many FMIs do not currently have the systems or infrastructure to monitor or assess indirect participant risk. Accordingly, without further requirements from policy-makers at the local level, these proposed standards may not amount to practical risk management improvements.

### *Principle 20 FMI links*

The issues which arise regarding interoperability in the cash markets are entirely different from those which arise in the OTC derivatives markets. Consequently, it is inappropriate to simply apply in one market principles developed in the other. If it is intended to extend an interoperability regime to OTC derivative CCPs, we believe that detailed consultation should be carried out as to the modalities which would be imposed in respect of such interoperability, including identification of risk models and collateralisation protocols. Formidable hurdles must be overcome before interoperability can be implemented safely between CCPs clearing OTC derivatives due, among other things, to the potential for systemic risk caused by the CCP which is the weakest link in the chain. For example, interoperability for cash equities requires additional collateral being posted by CMs to the interoperating CCPs. However, given that the risk profile and settlement periods of OTC derivatives are substantially different to the risk profile and settlement periods for cash equities, the required additional collateral would appear to be much higher. There are also many concerns in relation to how default management and resolution would work where CCPs interoperate.

As a minimum first step, CMs must be able to carry out proper due diligence on the risks to which they are exposed through their CCP(s)' proposed interoperability arrangements. To this end, we believe that CMs should be given access to the data necessary to carry out a full assessment of their CCP(s)' proposals (inclusive of relevant legal opinions supporting effective segregation and enforceability of collateral for interoperability purposes) for measuring, monitoring and managing the risks arising from interoperability well in advance of the launch of an interoperability arrangement.

We acknowledge the desirability of CCP interoperability in theory as it achieves the optimal combination of a virtual single CCP from each user's perspective and the benefits of competition. Under full interoperability, users can choose to work with a single CCP selected from possible choices within a competitive environment. CCP interoperability could also work against the establishment of CCP monopolies, which would result in costs passing back to the wider economy.

Indeed, without the ability for CMs to transfer positions from one CCP to another via CCP interoperability or in the absence of greater CCP consolidation, a CM will have to manage their swap books on a CCP-by-CCP basis. Such management would be necessary in order to control the amount of collateral the CM will have to provide to each CCP, and their consequent exposure to each CCP. For example, given that the US is characterised by fixed rate mortgages and Europe by pension plan asset-liability management, it is possible that swap dealer participants will be receiving fixed in rates at a US CCP, and paying fixed at an EU CCP. In which case, what was before a balanced rate book becomes very directional at each CCP, motivating collateral and exposure management, and the provision of higher rate markets for US cleared swaps relative to EU cleared swaps, thus fragmenting the liquidity of the market as it is today. While again acknowledging the considerable obstacles, the ability for CMs to transfer positions from one CCP to another also appears to be a route to resolve a CCP and in so doing address the systemic risk associated with CCP failure. Accordingly, CPSS-IOSCO minimum standards should be consistent with interoperability while recognising the substantial challenges in realising it.

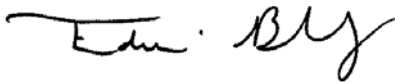
*Principle 23 Disclosure of rules and key procedures*

The governance structure of an FMI should require higher or heightened governance or approval processes than followed in the normal course of business for the alteration of its rules, procedures or contracts. In addition, the discretion of the FMI to make substantive changes in these areas should be limited and should align such revisions, where possible, with the interests of its major stakeholders, including in the case of a CCP, the CMs who are ultimately exposed to risk mutualisation. It is not sufficient that the process is “fully disclosed” - participants have an interest in clear, comprehensible rule sets that are applied consistently in conformity with the expectations and risk tolerances that participants evaluated when considering FMI membership.

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We appreciate the opportunity to provide these comments. Should you require further information, please do not hesitate to contact the undersigned.

Kind regards,

A handwritten signature in black ink, appearing to read "Edwin Budding". The signature is written in a cursive, flowing style.

Edwin Budding  
Policy Officer, Risk and Financial Regulation  
International Swaps and Derivatives Association, Inc.