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William C Dudley, Chair, Committee on Payment and Settlement Systems
Hans Hoogervorst (*taking over from Kathleen Casey*), Chair Technical Committee, IOSCO

Dear Mr Dudley, Mr Hoogervorst,

CPSS-IOSCO Consultative report ‘Guidance on the application of the 2004 CPSS-IOSCO recommendations for central counterparties to OTC derivatives CCPs – May 2010

Please find attached the response of the International Swaps and Derivatives Association (ISDA*) to the above-mentioned consultative report. We are pleased to have the opportunity to comment on the important issues addressed in this report, and would welcome further dialogue as appropriate.

Yours sincerely,



Richard Metcalfe, Head of Policy, ISDA

* ISDA, which represents participants in the privately negotiated derivatives industry, is among the world's largest global financial trade associations as measured by number of member firms. ISDA was chartered in 1985, and today has over 820 member institutions from 57 countries on six continents. These members include most of the world's major institutions that deal in privately negotiated derivatives, as well as many of the businesses, governmental entities and other end users that rely on over-the-counter derivatives to manage efficiently the financial market risks inherent in their core economic activities.

Since its inception, ISDA has pioneered efforts to identify and reduce risk in the derivatives and risk management business. Among its most notable accomplishments are: developing the ISDA Master Agreement; publishing a wide range of related documentation materials and instruments covering a variety of transaction types; producing legal opinions on the enforceability of netting and collateral arrangements; securing recognition of the risk-reducing effects of netting in determining capital requirements; promoting sound risk management practices, and advancing the understanding and treatment of derivatives and risk management from public policy and regulatory capital perspectives.

Response

The International Swaps and Derivatives Association (ISDA) is pleased to respond to the consultation *Recommendations for central counterparties to OTC derivatives CCPs*. We commend the efforts of the CPSS-IOSCO working group (WG) in updating standards for CCPs, and welcome the chance to respond to this consultative report.

ISDA warmly welcomes this paper, as a timely and perceptive contribution to a highly topical issue, which is of great relevance to systemic risk management and which demands careful analysis. The role of clearing in OTC derivatives has been developing rapidly, having been initially applied to interest rate swaps in the late 1990s; and subsequently to credit derivatives (CDS), as that market grew sufficiently large to support it. In such large, liquid markets, CCPs offer an alternative way of managing 'interconnectedness' by means of risk mutualisation; and incremental efficiencies in exposure reduction through multilateral rather than bilateral netting.

In this context, we believe that the paper could helpfully emphasise certain points more, though we accept that it may stop short of detailed prescription, since the exact standards applicable to a CCP will depend on the product(s) cleared, the counterparties faced and the structure it adopts. Some key points are set out below, followed by some more detailed issues, particularly as regards financial resources.

Key Points

Generally, ISDA supports the use of CCPs, wherever that is a safe course to follow. A crucial aspect of this is determining what products are safe to clear in the first place (rather than simply applying certain standards to any or every OTC derivative that a CCP might wish to clear). ISDA firmly believes that this situation necessitates full three-way co-operation between:

- 1) The CCP itself;
- 2) The CCP's supervisor;
- 3) Clearing Members, whose resources form the main backing for the CCP.

Clearly, given the immense systemic impact of any CCP failure, it will be vital to ensure there is no 'race to the bottom' in terms of the standards to which CCPs adhere. This brings into play not only margin and financial resources more generally but other, closely related matters too.

Margin (especially initial margin) plays a crucial role in absorbing the losses a CCP might incur in liquidating the portfolio of a defaulting Clearing Member (CM). This means that, in order to determine the appropriate margin requirements, a CCP's Risk Committee must have a high degree of confidence as to the likely liquidity of the relevant risk-transfer market in question, as this will be crucial in limiting those losses. (Margins levels intended to cover losses on member default must reflect unwind costs for the market in stress conditions, and particularly, those of concentrated positions.) At the same time, 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 other words, margins are only computable in the limit of a contractual, transparent and fully, regularly tested arrangement to effect the default process.

This is why it is also essential for the CCP to have in place arrangements whereby non-defaulting CMs provide experienced front-office (trading) staff to the CCP during the liquidation process. Ultimately, it is non-defaulting Clearing Members who have the most at stake with respect to the outcome of the liquidation process, since its failure could *in extremis* see CMs' books revert to something worse than their pre-cleared state (with multiple exposures but without the full amounts of collateral that would be in place in a normal bilateral relationship).

In light of all of the above, ISDA believes that it is vital to formally recognise: i) the long lead time in setting up a CCP, to allow for careful risk modelling and the testing thereof; and ii) the compounding of complexity that would be involved in interoperability between multiple CCPs.

Interoperability is a step that should not be taken without the considered consent of a CCP's users, and particularly its clearing members. The challenges of interoperability increase significantly as the complexity of clearing the product increases. By way of illustration, interoperability between distinct CCPs for CDS would raise many risk-management issues (primarily in relation to the long-term contingent credit exposure, but also in legal and other forms of operational risk.) (Where interoperability is planned across borders, it should be approached in conjunction with global co-ordination among regulators.)

At the same time, there should be rigorous standards of transparency imposed on all CCPs regarding their proposed:

- membership criteria, given the absolutely crucial role of strong members in what is essentially a process of risk mutualisation;
- product-approval, pricing and default-management processes;
- margin requirements and how those are calculated;
- emergency powers;
- the limits (or possible lack thereof) on the liability of clearing members; and also
- governance framework and specific involvement/roles of clearing members vis-à-vis CCP (ie, measures that address whose interests members on committees are protecting - the CCP's, those of their own firms, or those of the market overall).

Given the intended role of CCPs in reducing systemic risk, the question as to their ownership should primarily be analysed in terms of whether it delivers governance that in turn supports that aim of systemic risk reduction, ie, adequately addressing the risk assessment and management questions outlined above. So, while the identity of owners is not *per se* an issue, it should nonetheless support the (CCP-Supervisor-CM) tri-partite governance model outlined above, and the crucial role of the risk committee; and, by extension, those whose resources provide the financial backing for the CCP. In ISDA's view, the whole point of the standards that are the subject of the current consultative report is to ensure that CCPs do not compete in inappropriate ways. Ownership models should not unnecessarily preclude clearing members, who are well qualified to deliver on these systemic aims.

As regards the interests of indirect, non-clearing members, we note that the key considerations are i) the safety of the CCP (which is a function of how the issues above are addressed); and ii) the safety of their own positions vis-à-vis any CM that defaults, meaning that there must be robust and transparent arrangements in place for portability of positions and margin, as and when required. Segregation may play a role in this process, and a CCP must, in any case, make transparent the firm arrangements it has in place on this matter.

Standards of data confidentiality – as faced in relation to Trade Repositories – will apply equally to CCPs, as should measures such as Chinese Walls and other procedures relating to the handling of material non-public information. (*Please see our response on the TR consultation for more detailed comments on this topic.*)

With respect to the relationship between the current report and the CPSS-IOSCO review of internal standards for financial infrastructures, the document states: "Issues that are equally applicable to CCPs and other types of FMIs are not discussed in this report." We question this approach as, even though the transparency/liquidity of exchange-traded products is far greater, we believe that many of the standards being proposed and discussed for OTC clearing should also be considered by CPSS-IOSCO within the comprehensive review, as they may apply to the exchange-traded market as well.

As regards the interaction between CCPs and the 'Determinations Committee' we note the instruction to ISDA in Annex 2 ('Detailed guidance on CCP emergency actions and market protocols', specifically footnote 28 relating to section 4). We have already worked with the OTC Derivatives Regulators Forum (ORF) to deliver a proposal regarding CCP participation as observers in the ISDA Credit Derivatives

Determinations Committees. As the DCs have functioned well, in line with their careful design, we believe the over-riding consideration should be to ensure that its effectiveness is not disrupted in any way. .

We take this opportunity to stress the importance of avoiding determinations that diverge from the market consensus, and believe that the duplication of determinations processes within clearing houses should be guarded against. More broadly, emergency powers should be constrained, such that they can only be exercised in a limited and clearly articulated set of circumstances; for systemic risk benefit; in close co-ordination with both supervisors and the risk committee; rather than for any commercial gain of the CCP. Moreover, the consequences of any exercise of emergency powers should be mitigated to preserve the economic terms of the affected trades and the contractual expectations of the participants.

Like the CPSS-IOSCO Working Group, we believe that well designed CCPs can have a vital place in reducing the risks faced by market participants¹. However it is important to note at the outset that the failure of a CCP would almost certainly be a systemic event, and thus it is vital that CCP's are held to particularly robust standards.

In particular, since a CCP is likely to be systemically significant, it should have standards of supervision, financial-resource requirements, liquidity requirements and disclosure standards commensurate with (or higher than) those of any bank undertaking the same activity.

In our view, the consultative report does not set out criteria which meet this standard. We believe that CPSS-IOSCO should take as a starting point the current and proposed rules for banks under the Basel Accord and then relax those for CCPs, where such relaxation does not introduce competitive distortions or increase risk in the market; but also adopt stress-tests and tailored guidance, to reflect the particular product being cleared and the clearing house's own structure.

In fact, we believe it is instructive to consider a number of areas where the operating and regulatory standards applicable to banks could be relevant to CCPs:

- access to the central bank window (and reduced funding liquidity risk).
- standards for resolution and the ability of supervisors to successfully implement remedial measures before a CCP becomes significantly undercapitalized.
- enhanced transparency, ensuring that CCPs provide their stake-holders, counterparties and others with sufficient information to make informed credit judgements.
- the treatment of members' excess margin at a CCP (as compared with a bank deposit), and in particular its legal status in the event of a CCP bankruptcy – again, this could be beneficial in the CCP's liquidity risk profile, particularly in some jurisdictions.

High standards in relation to CCPs would discourage their proliferation, proliferation being a phenomenon that would reduce netting benefits and increase both operational and counterparty risks.

CCP financial resources

The capital structure and support of a CCP is different from a typical credit institution, in that it typically has various layers of protection beyond variation margin, including initial margin, the default fund, equity capitalisation, and possibly other capital substitutes such as insurance and committed lines of credit to be used for short-term liquidity purposes. Generally, one would expect CCPs to be resourced at least to the same degree as banks where they face the equivalent risk, taking full account of their potential systemic impact.

¹ In cases where only parts of the portfolio with a counterparty can be centrally cleared and where all of the transactions in the portfolio taken collectively offset each other, bilateral risk between counterparties can increase if some of the transactions are taken out of the netting set and novated to a CCP.

Supervision (Pillar 2-type) and ('Pillar 3') disclosure and best practice standards could be applied to a CCP on a uniform basis. Liquidity and leverage requirements could also be relevant. (We note in passing that Pillar 2 is particularly important, as CCPs are likely to have a very concentrated portfolio of credit risk – a risk profile which may not be correctly capitalised if one were applying the Basel II IRB rules – and thus as per paragraph 724 of Basel II, an additional Pillar 2 treatment may be required.) This 'Basel-like' approach would help to ensure that CCPs meet robust international standards that are viewed as appropriate for systemically important financial institutions.

We note too the lack of recommendation on two related, salient features of a CCP's activities: its investment strategy and liquidity risk. A CCP's capital will be small compared to the amount of margin that needs to be invested, and even small losses compared to the investment amount have the potential to wipe out the capital. Therefore CCPs should be required to have well defined, extremely prudent investment policies. To complement this, supervisors should ensure that a CCP is well capitalised for its investment risk, in addition to requiring sufficient capital for the CCP's counterparty risk.

Again, this would suggest a treatment of the CCP's investment positions comparable to that under Basel. Further, to mitigate the risk of a 'run on a CCP', possibly caused by a default or CCP downgrade, we suggest that in addition a CCP is regulated for liquidity risk purposes, with an appropriate buffer of highly liquid assets available to meet unexpected demands for cash.

Our more detailed response follows, and is structured analogously to the consultative report.

Our specific comments on the proposed Guidance are as follows.

With respect to “no tailored guidance” being proposed within *Recommendations 7, 9, 10 and 11*; we understand that these recommendations may be more broadly covered in the “comprehensive review of RCCP” being conducted. We would in any case argue that there are elements of physical delivery (RCCP recommendation 10), particularly due to a CDS ‘Restructuring’ event, that will need tailored guidance with respect to the bilateral match/assignment process, margining, and the CCPs role through final delivery.

Recommendation 2

We do not believe regulators are being prescriptive enough with respect to **Participation requirements** for OTC clearing houses. The fundamental structure of a CCP is the mutualisation of counterparty risk between members: members provide the capital which ‘backstops’ the CCP in the event that another member defaults. In light of this, we believe regulators should take a stand on minimum membership capital/other financial requirements, just as they do for futures CCPs. In determining appropriate minimum capital levels, consideration should be given to the level of liquidity and the risks of the products to be cleared, and how those factors might vary in future.

- CCPs should have robust processes for the evaluation of the credit quality of members at initiation of membership and on an ongoing basis (ie, this should be reviewed at least annually).
- CCPs should be required to perform formal monitoring of members' compliance with participation requirements at least once per quarter. Non-compliance with financial membership requirements should result in the clearing house requiring either additional margin or a reduction in open positions by the next day.
- To ensure that liabilities/risks are well-understood by all market participants, membership rules should also clearly define those circumstances under which a CCP can terminate the membership of one of its clearing members, as well as the process and timing by which a clearing participant may withdraw its membership.

Regarding the participation of regulated entities in a CCP, the draft recommendation states that participants should have sufficient financial resources and robust operational capacities. This is a major issue for a CCP, as such infrastructure will always be as weak as the weakest of its *direct* members. In other words, direct eligibility to a CCP should be limited to the best counterparties. For this reason, other criteria should be included in relation to selecting CCP members, such as the rating of the counterparty and its capital ratios.

Regarding the participation of non-regulated entities, the consultation paper rightly points out that their participation in a CCP can present risk management challenges. Non-regulated entities may, of course, use the CCP by means of indirect access (ie, via a clearing member). There would then be a need to specify appropriate rules regarding the segregation and portability of assets.

Each direct participant should have the capability (in terms of financial and operational resources) to be able to participate in the risk management process of a CCP in a stress environment (eg, a member default) to encourage both liquidity (in the sense of being able to unwind quickly and efficiently the positions of the defaulting participant) and portability (such that positions of indirect participants, held via the defaulting clearing member, are portable to other non-defaulting clearing members). Guidance 2.2 reflects this; 2.1 less so.

Recommendation 3 (credit exposures)

For a bilateral OTC derivatives transaction, a conservative valuation strategy is possible. That is, an OTC derivatives market participant will be mindful of its position, long or short, in determining fair value. This is however not possible for a CCP, as that party is both long and short to different counterparties. Moreover, CCP valuations are visible to the market and hence are likely to be used by other market participants as indicators of fair value. Therefore accurate valuation is even more critical for a CCP than it would be for a bank. In this context proposed guidance on pricing is neither specific nor stringent enough, and may not result in sufficiently robust valuations. CCPs should in addition conduct regular

testing of their valuations against OTC market valuations for a wide range of products, and that price testing should be regularly reviewed by their supervisor.

Furthermore stress tests of adverse market conditions including liquidity stresses (a simultaneous stress of the liquidity of valuation inputs and of the CCP's liquidity) should be regularly carried out and reviewed in the context of the CCP's legal requirements to make margin calls based on accurate prices, and to remain liquid despite the potential withdrawal of multiple clearing members with large margin balances.

With respect to measurement and management of **credit exposures**, the paper does not address the following and these should be considered:

- Position limits: the paper is silent on whether (and if so, how) a CCP should set limits against its clearing members and their clients. We would recommend that CCPs limit the potential for uncollateralized exposure through the use of position limits at the clearing member level and, once these limits are established, they should be subject to bank-like monitoring processes. As the proportion of OTC trades on CCPs increases, so will the systemic importance of limits and related monitoring, and such processes will need to be routinely examined by supervisory authorities, along with other key controls and methodologies. More specifically, we would suggest that initial "warning" limits be defined, which, once breached, would trigger automatic reviews of member/client level exposures and timely discussions with the CM. Higher-level, hard limits should also be imposed such that, once breached, pre-defined action plans specified in procedures (eg, automatic calls for position reduction and/or posting of collateral) are followed.
- Exposure monitoring: CCPs should have the ability to monitor and control large exposures at the end-client level (across clearing members), as well as by clearing member. Any potential for large exposures would also merit consideration, where interoperability was contemplated.

Recommendation 4

It is vital to recognise the distinct roles that **margin** and default funds play, with adequate and well documented margining policies playing the primary role in the CCP's ability to absorb loss and therefore the degree of confidence that it enjoys from all market participants. It may be important to stress that it is not appropriate for default funds to play any role other than as a back-up for those extreme circumstances when margin does not suffice.

We agree with the assertion that correlation instability can result in large margin calls during periods of margin stress. We would go further than the paper however, and require complete technical details of the portfolio margining method to be made available, including specification of assumed liquidation timeframes for the product being cleared. Any material changes to this method should be approved before implementation by a risk committee consisting of sufficient representation from clearing members.

A wider concern in this context is the procyclicality of margin (particularly initial margin). As the Committee on the Global Financial System has recently pointed out (in paper No. 36), margin requirements can make a significant contribution to procyclicality. OTC margin currently has a limited effect here as margin requirements are typically fixed under the terms of an OTC derivatives credit support annex. Supervisors may wish to ensure that this desirable lack of procyclicality carries over to CCP margin calculations.

Established market practice in the exchange traded CCP market allows for a wide range of eligible collateral assets that are generally not included in the terms of the typical bilateral OTC derivatives (ISDA) Credit Support Annex. To avoid unintended and undesirable negative results of wrong-way correlation between a portfolio and collateral assets, stress testing should include a stress for wrong-way collateral risk, to discourage counterparties from pledging wrong-way correlated (yet eligible) assets to meet margin requirements.

An important technical nuance arises in connection with the pricing from which variation is calculated. It is well established that variation margin plays an important role in offsetting the mark-to-market counterparty exposure on a portfolio. It should, at the same time, be recognised that marking to market may take different forms for different products. In some cases, the product may be priced directly (for instance CDS), but in others (notably interest rate swaps), it is the parameters (ie, the relevant yield curve) that would be supplied to the clearing house by each CM. Pricing should, of course, be at 'mid', with initial margin addressing the bid-offer spread.

Collateral, both client and clearing-member, should also be segregated from the clearing house's own assets, such that it is fully secured and protected in the event of the CCP's insolvency.

The recommendation also refers to the fact that OTC derivatives will be less liquid than products on other listed markets. Obviously this fact should be taken into account. We note, however, that instruments should simply not be centrally cleared if they are not liquid enough.

Recommendation 5

Within the question of financial resources, it is important that CCP's stress testing meets best practice standards. Stress tests should contribute to the CCP remaining well resourced after a plausible market crisis, including an extended period of illiquidity and the default of more than one large clearing member.

With longer close-out periods anticipated for OTC cleared products, the probability of another clearing member defaulting during a close out is higher, and needs to be accounted for as part of the (funded) portion of the CCP's safeguards.

Recommendation 6

It is important not just that key aspects of the default procedure be publically available, but that the CCP has obtained legal opinions that demonstrate that its procedures are of a similar robustness to those available for transactions under an ISDA Master Agreement and Credit Support Annex.

For OTC markets, where there tends to be a wide variety of non-fungible product, the defaulting member portfolio(s) needs to be hedged as a first response, and then auctioned off to other clearing members, necessary contractually committed but also economically incentivized to bid. The hedging program needs to be developed internally and reviewed and approved by the Risk Committee well in advance of any default, ideally in advance of any significant clearing, so that it can be executed with assurance and immediacy.

Recommendation 8

CCPs should meet requirements in relation to operational risk comparable to those for banks under Pillar 1 of the Basel Accord. While it may in practice be able to rely on margin (and, *in extremis*, default funds and other layers of protection) to cover its credit risk, a CCP's operational exposures may require separate attention and resources.

This is critical as a CCP's potential losses from operational risk arising from its interconnectedness are far greater than those of any individual financial institution alone.

Recommendation 13

Governance arrangements for a CCP should reflect Clearing Members' exposure to risk mutualisation and provide Clearing Members with effective tools to monitor/manage risk taken by the CCP. Any emergency powers of the CCP (or plans for interoperability) should be subject to prior consultation with and approval by the risk committee of the applicable product class and relevant regulatory authorities.

In addition:

- CCPs should be required to have a well-trained and staffed **internal audit** department to ensure that all policies, procedures and methodologies are sufficient for its level of risk. The audit

department should have the requisite expertise in OTC markets. Audit reports should be regularly provided to regulators and clearing members.

- CCPs should be required to have both formal **model validation and new business approval** processes to ensure that the CCP has sufficient processes, methodologies and staff in place prior to the launch of a new product. All models developed by CCPs should not just be “tested” but be subject to either full re-implementation by an internal independent team or an external review and validation by leading, accredited and independent academics.
- Moreover, the governance framework should clearly stipulate when a new product/instrument will require local regulatory approval prior to launch.

Recommendation 14

While we acknowledge that CCPs can have a role in market transparency, we believe that such an issue goes largely beyond the scope of a technical paper on CCPs and should be analysed together with the consultation on Trade Repositories. There could be limited added value in giving the same requirements on post-trade transparency for both CCPs and TRs, as the latter will cover a broader scope than the former and such duplication may be harmful rather than beneficial.

Regarding the pre trade transparency role that a CCP can play, we should bear in mind that pre-trade transparency is generally recognised as being excellent across OTC derivatives and that data relating to specific risk-transfer transactions would normally be considered commercially confidential (viz, in the insurance sector). Therefore, we firmly believe that, when considering any wider dissemination of data, it is essential to clearly identify what constitutes a genuine, proven benefit. For instance, aggregate information about market volumes can help participants assess the depth of that market without revealing anything of a commercially sensitive nature. We do however caution against assumptions that forcing participants to show their hand will somehow ‘create’ liquidity, when inappropriately calibrated transparency would be more likely to have the opposite effect. We therefore support the CR’s line that data availability should be “in line with... respective information needs”. Due regard should be had for any impact on the ability of the market to function in the first place and the position of intermediaries whose capital is at risk every time they enter a transaction as principal.

Recommendation 15

Regulation and oversight should provide a level playing field across CCPs and jurisdictions to avoid regulatory arbitrage,

Distinctive Features of OTC derivatives CCPs and the need for tailored guidance

Products suitable for clearing. We agree that not all products will be suitable for clearing, including those where the CCP does not have the requisite valuation or risk management skills. However, the issue here is broader. Liquidity can come and go in a product. (For instance, CDS protection on ABX tranches was highly liquid in 2005-2006, but these products were scantily traded in 2008.) Therefore, unless CCPs set a very high bar as to what they set out to clear in the first place, they will need to have in place procedures for the valuation and risk management of products which assume extended periods of illiquidity. In any case, the assessment as to the suitability of a product for clearing should account for any potential future illiquidity.

In addition, a process should be defined for products to exit the clearing regime, should they become unsuitable for central clearing.

Submission of transaction for clearing. We agree with the Committee that the existence of multiple connected systems submitting trades for clearing gives rise to concerns of efficiency, reliability and interoperability. We therefore view it as vital, as mentioned above, that CCPs are subject to the Basel 2 operational risk framework, including capital requirements for operational risk, disclosure of operational risk losses, and benchmarking of their operational risk model.

On the other hand, we support competition between providers and an open platform approach. We do not think vertical integration of exchanges, CCPs and transaction systems is desirable.

Scope of participants and markets. The global nature of the derivatives market and the likelihood of cross-border clearing give rise to significant legal issues, as the Committee observes. Legal certainty is required here. Therefore, before a CCP operates in a new jurisdiction or accepts clearing members domiciled in a new country, it should have robust legal opinions covering all material aspects of its operations. In particular these should cover default/bankruptcy, perfection/ transfer of margin and default fund contributions, netting of positions, the duty of care owed (if any) on portfolio liquidation, the segregation of margin and the transferability of client positions of a defaulting clearing member to a non-defaulting clearing member.

Proposed guidance on the application of the RCCP to OTC derivatives CCPs

Guidance 1.1: The introduction should also mention the Credit Support Annex, as (building on the massive exposure reduction and systemic risk containment achieved through bilateral close-out netting) bilateral collateralisation of transactions provides nearly as much risk mitigation as a CCP, without the systemic implication of centralising this mitigation.

As drafted, the report suggests that a CCP should be free to decide to what extent it will incorporate existing OTC derivative industry standards and market protocols. We believe that CCPs should be designed and operated to eliminate legal, operational and especially economic basis risk between cleared and non-cleared OTC derivative positions, and should therefore incorporate existent product architecture to the fullest extent possible. CCP models that do not take this approach and are basis risk additive, in contrast, do not provide the proper incentives to central clearing and would be an obstacle to any potential future interoperability.

Guidance 2.1. It is critical that CCPs formally define distinct membership categories with requirements specifically tailored to each category, similar to the way futures and securities clearinghouses operate. Moreover, prior to considering entities becoming direct members, a CCP should ensure that its staff has the appropriate expertise to evaluate the creditworthiness and other membership criteria on a continuous basis. The most conservative approach from a margin perspective would be to require such members to post initial margin on a gross-upfront basis prior to the CCP accepting the trade for clearing, but this would obviously result in a higher cost to such members. Alternatively, a CCP could strictly limit the amount of uncollateralized exposure taken through the use of capital-based member position limits.

Guidance 2.2. Participation requirements for non-dealer members should address the extent to which such end-users should or should not participate in default procedures. Dealer members should be involved in this decision. Industry discussions continue on the exact mechanism that would be appropriate.

Guidance 3.1. Self referencing transactions should either not be allowed at all, or should be treated in a similar way as suggested in BCBS 164 – for capital and margin purposes.

Guidance 3.2. We support the Committee's concern with pricing data, and we have outlined some concerns above. We also suggest that the issue requires tougher guidance than that provided, for one further reason. The process of calling margin under a clearing agreement has a legal character: the amount called must be defensible as fair (or at least determined in good faith). For OTC derivatives, fairness is ensured by the dispute resolution process. However there is no comparable process – other than recourse to the courts – for a clearing member to challenge a CCP's valuation. Therefore it is particularly important that a CCP's valuations are legally robust. Clearly the consequences of a successful legal challenge here would be severe, not just for the CCP itself but for confidence in the financial system.

In addition, all pricing methodologies and sources should be reviewed and approved by the risk committee, to ensure that the major clearing participants are in full agreement with the CCP's approach.

Guidance 4.1. With respect to the proper sizing of margin in response to calculated risk exposure, it is important that regulators exercise their oversight function to prevent CCP competition from creating a downward spiral in minimum margin requirements to capture market share. Regulators should require minimum standards for risk methodology, governance, capitalization, default management, and other crucial aspects relevant to the stability of CCPs, and coordinate such standards internationally to prevent arbitrage. Moreover, regulatory guidance on the appropriate ratio between initial margin requirements for non-participant clients and guarantee fund contributions by clearing members would encourage a standardized approach to properly allocating the costs of central clearing between direct and indirect risk contributors to the CCPs.

Guidance 4.2 Regulators should be more prescriptive (with a minimum confidence level of 99% and minimum holding period required per asset type with longer horizons being required for less liquid products within asset class). However, in the case of CDS in particular markets (where the occurrence and persistence of outliers is significant), applying traditional statistical methods have been shown to be unreliable. Regulators should accordingly require CCPs to develop more robust alternative methods, which result in a very different view of where confidence limits should lie for even the most liquid products. The universal adoption of advanced, statistically robust techniques should be encouraged, in order to provide more reliability in the estimation of confidence limits.

With respect to the appropriate length of the holding period, current practice among CCPs is an assumption of 5 days. This may be realistic in normal market conditions for most products. However, in periods of prolonged illiquidity or market dislocation, the effective periods for exiting positions can be far longer. In the CDS single name world in particular, some names may trade only a few times during a two-week period under normal conditions, with far fewer trades in abnormal conditions. Thus, a 'one-size-fits-all' approach should not be applied, even within a given asset type. The appropriate holding period assumption at an instrument level should be driven by:

- type of instrument (liquid/illiquid, index/single name, investment grade or high yield, etc),
- size of the holding, and
- whether "normal" market conditions exist or whether there is the possibility of a market disruption event.

Thus, even within a given asset type, holding periods may need to stretch from 5 days for market-size positions on the most liquid products, to 30 days for large positions on the least liquid instruments.

Guidance 5.1 and 5.2. These are neither specific nor prescriptive enough. Here are some additional points:

- To ensure that the guarantee/default fund elements of a CCP's waterfall protection structure provide adequate protection against systemic risk, it is critical that the appropriate balance be achieved between the guarantee/default fund and the margin and not be pushed too far in favour of reducing the margin, which could result in the CCP not being adequately protected in the event of one or more member defaults. At the same time, guarantee fund contributions of clearing members should be large enough to incentivize strong participation of survivors in default management.
- CCPs should have formal processes in place for requiring increases be made to its level of financial safeguards, if stress tests results indicate a shortfall either (1) at the aggregate level or (2) at the individual member's portfolio level (share of risk has increased vis-à-vis the CCP's total risk). In this vein, a CCP should have a formal process by which additional amounts are required by participants and/or the clearinghouse itself.

- Regulators should be more explicit in 5.2 with respect to situations when a separate legal entity should be required to properly segregate risks amongst different sets of market participants and curtail systemic risk to the overall market.
- Financial safeguards could include some first-loss amount to be paid by the CCP prior to non-defaulting members. This would create an incentive for the clearinghouse to create and maintain a robust margining approach.

Guidance 6.1. Accepting unlimited forced allocation of the defaulting member's portfolio runs counter a member's need to properly measure their potential exposure to CCPs, and may in fact mean unlimited liability for each member to the defaulting member(s) via the CCP as a conduit. It seeks to preserve the solvency of the CCP at the expense of the major dealers, a trade-off that may ultimately lead to increased systemic risk.

An industry working group is in the process of developing best practice rules governing how auction processes for a defaulting member's CDS portfolio should work. This envisages that, in the event that residual positions remained and the CCP lacked sufficient funds to close out these positions, then the CCP should either be forced into insolvency or could be recapitalised in conjunction with the consenting clearing participants. Such sound auction practices are expected to be applied, as appropriate, to other OTC asset types.

The report also suggests that contingent factors related to a defaulted participant's portfolio, such as complexity, scale, and liquidity may necessitate *ex ante* modifications to a CCP's default procedures. While we agree that flexibility may be required due to the unique circumstance of each participant default, the CCP should strive to implement its documented default procedures whenever possible in order to meet participant expectation and maintain market confidence. In addition, we note that any request for secondment of traders to effect the default procedures is likely to come at a moment of significant market dislocation and turmoil when the skill of the traders in question is highly valuable to their respective employers. It is advisable, therefore, that a CCP have firm commitments in advance from its clearing participants to provide the requisite trading personnel, rather than rely upon an *ex ante* process to supply this crucial component of default management.

Guidance 6.2 As part of the sound practice CDS auction rules discussed in 6.1 above, the industry is examining the specifics of how a defaulting member's portfolio may be hedged where possible, and structured for auction purposes. Such practices should be adopted by the relevant CCPs. Similar standards should be developed for other asset types.

Guidance 6.3. This section on governance could be more specific. A CCP's default procedures should clearly define "events of default" such that any discretion on the part of the clearinghouse to put a member in default is bound by specific circumstances such as insolvency and failure to pay margin/final settlement obligations.

Guidance 8.1 Regulators should hold CCPs to at least the same set of operational control standards as financial institutions. In this vein, CCPs must ensure and review proper SAS 70s conducted on third-party service providers upon which they rely.

Guidance 8.2. The US equity market 'flash crash' of 6th May, 2010 illustrated the complex, unpredictable behaviour of interlinked, automated trading and settlement systems. While the precise dynamics of that event are not yet clear, we do suggest that its occurrence demonstrates the desirability of being able to suspend trading and settlement quickly and conclusively during a moment of crisis. We therefore recommend that all CCPs have clear and robust systems relating to the suspension of activities, by others or by themselves, and that these be regularly tested. System capacity, as well as operational capacity in general, must be considered as part of a CCP's internal new product approval process.

Guidance 8.3. With respect to the need for access to OTC derivative CCPs abroad, we agree with the report's conclusions regarding the need to address operational issues arising from a global participant

base. In this context, we strongly urge global regulators to address any unresolved issues of foreign CCP “equivalence” in favour of promoting open access to foreign and domestic clearing venues.

Guidance 12.2 and 12.3: Clearing participants should play an instrumental governance role in CCP decisions to expand its services to support additional exchanges/trading platforms or other OTC assets.

Guidance 13.1. Regulators should go further in requiring representation by key participants in the ongoing risk management of any CCP. The level of representation should be calibrated to the level of exposure the participants’ have to a CCP. In most CCP structures, the vast majority of capital standing behind the CCP in the event of a member default is provided by the other members of such CCP in the form of posted guarantee fund contributions and assessment rights. CCPs generally provide only a small percentage of the overall capital in the structure. In addition, CCPs can benefit from the risk management and market expertise of its members.

Guidance 13.2 Please see our earlier comments in relation to emergency powers.

Guidance 13.3 A required new product approval process should be made explicit here.

Guidance 13.4. We agree that it is appropriate that market governance arrangements should evolve in such a way that reflects the role of CCPs. However, we do not think that this necessitates CCPs participation in determinations of credit events. The CCP should have little or no economic interest in such a determination, and certainly it should not exercise a vote even if it does have an economic interest, as a self-serving vote from a CCP is likely to cause a catastrophic loss of confidence in central clearing and, equally, be detrimental to the reputation of the Determinations Committee process. Rather the CCP should implement the industry-wide determination without bias. In this context we view it as particularly inappropriate for a CCP to substitute its own determinations for those of a determination by the relevant market committee, as suggested in the last sentence in the final paragraph of this guidance.

Annex 2: The report addresses the scope and circumstances under which a CCP may exercise “extraordinary emergency” powers. We have significant concerns with broad emergency powers. While we are generally in agreement with the principles set forth by CPSS-IOSCO to govern the use of emergency powers by a CCP, the very existence of emergency powers of any significance makes it very difficult for participants to “understand and manage the risk associated with their participation in the CCP and their contingent liabilities vis-à-vis the CCP.”

Conclusion

We hope that the comments above are helpful. Naturally, we would welcome any opportunity to discuss them in more detail with any interested parties.

We believe that CCPs have a vital role to play, alongside supervisory transparency and legal and operational robustness, in ensuring a financial system that supports OTC derivatives as a widely used risk-transfer tool. We believe the appropriate standards are crucial in ensuring that this alternative means of managing ‘interconnectedness’ does not introduce unintended new issues.