

April 03, 2012

**Industry Response to the European Banking Authority, European Securities Markets' Association and European Insurance and Occupational Pensions Authority Joint Discussion Paper on Risk Mitigation Techniques for Trades not Cleared by a Central Counterparty.**

**A. Introduction**

The International Swaps and Derivatives Association ("ISDA") together with members of the Financial Services Industry ("The Industry") welcome the opportunity to comment on the above Joint Discussion Paper ("the Paper"). The Industry is supportive of the Paper's aims and objectives and understands the desire expressed by the G20 nations to require Over the Counter ("OTC") derivatives to be cleared where appropriate and for uncleared trades to be subject to robust operational processes and capital requirements.

In particular we agree with the concepts of Minimum Transfer Amounts (see question 14) and the requirement, where appropriate, to mark collateral to market daily. We believe that a very significant proportion of uncleared OTC trades will be covered by these requirements. In setting out the matters below where we feel that further discussion is needed, this should be seen in the context of a broad agreement as to aims and objectives and a willingness to work together with regulators to ensure that the proposals are sensitive to industry practice, risk sensitive and workable. Further we fully support the proposals in paragraph 15 of the paper to disapply the collateral requirements to Non Financial Counterparties which are not above the (clearing) threshold.

The Industry believes that in crafting legislation to reduce systemic risk, regulators must strive to strike the right balance between efficient risk management, financial stability while seeking to maintain financial innovation and prudent risk-taking supported by sound business practice and encouraging economic expansion. We are very concerned as to the potential for economic dislocation that a mandatory Initial Margin regime could trigger. We therefore urge policy makers both in the European Union and globally to undertake a robust (i.e. quantitative) cost benefit analysis to ensure that any expected reduction in risk is not outweighed by direct and indirect costs stemming from the unprecedented systemic liquidity demands.

Principal matters where The Industry believes that further dialogue would be beneficial:

- I. There should not be an imposition of a single risk mitigation regime. Rather, firms should be allowed to exercise proper commercial judgement to deploy a number of risk mitigants which are available in the OTC space when exercising risk management. In particular, there should be no requirement to collect Initial Margin ("IM") on uncleared trades. IM is one of a number of credit risk mitigants for uncleared trades. Firms should be able to choose IM or

other forms or risk mitigation to achieve the required level of financial security. Under the CRD IV<sup>1</sup> proposals derivatives prices will rise significantly. End users should be able to determine the appropriate balance between funding IM and paying the full price.

- II. Similarly firms should be free to set appropriate thresholds for collecting Variation Margin (“VM”) by reference to counterparty type, trade and asset type, available capital, liquidity and risk appetite. Many firms have developed collateral models which allow counterparties to benefit from a single margin call resulting from netting and offsetting positions across all trading activities including both cleared and non-cleared derivatives, exchange-traded and securities financing activities. This maximises efficiencies and minimises costs and operational risks. There are fundamental differences in the capital structures of CCP’s and firms which lead to differing blends of IM, VM thresholds and default funds available. CCP’s are operated principally to minimise risk whereas firms are operated to balance risk and reward.
- III. In the case of certain Foreign Exchange (“FX”) trades, an exemption from clearing has been proposed, for a number of reasons including the availability of Continuous Linked Settlement (“CLS”), in the United States, and also HK and Singapore. Within EMIR, the recitals reflect that ESMA should take these same reasons into consideration. Broadly these exemptions recognise that for FX trades, settlement risk is the main risk, and the risk mitigation that clearing provides is not the most appropriate mechanism for addressing such risk. It therefore follows that such trades should attract lower regulatory capital and margin requirements, if any at all, than other uncleared trades to reflect this lower level of risk<sup>2</sup>. The Industry believes strongly that a level international playing field is required to promote competition and prevent the distortions in trade which result from differing regulatory regimes. There are a number of areas including the arrangements around Swaps Dealers and Major Swap Participants where unnecessary differences are being introduced between the proposed European and US regimes. The Industry strongly urges regulators to harmonise to

---

<sup>1</sup> Capital Requirements Directive IV

<sup>2</sup> ESMA should take into account the systemic relevance of the relevant market in order to help ensure that the application of a clearing obligation would not result in undue risk being assumed by the market and overall financial system. Size should be measured not only in terms of volume, but also values. Unique characteristics to the derivative product, e.g., the physically delivery aspect to FX forwards and FX swaps, must also be taken into consideration.

the maximum extent possible their implementations of the Basel III<sup>3</sup> proposals, as well as proposed margin requirements.

- IV. The timing of the introduction of these Regulatory Technical Standards is unclear. Requirements which involve changing levels of capital and margin affect the economics and pricing of transactions. Transactions cannot be priced until all of the new requirements are understood and it is simply not possible to introduce requirements to clear, margin or capitalise transactions until these details have been agreed and given widespread publicity. The industry is very concerned that, as currently drafted, requirements to alter the economics of trades might be introduced prior to the details having been agreed. This would seriously interfere with firms abilities to conduct business during this period. The levels of legal risk could cause significant disruption to the operation of markets. It is also unclear which transactions fall within scope of capital or collateral requirements under EMIR by virtue of being classed as “derivatives”. Clarity is vital on this point and The Industry believes that this should not include physically settled commodity forwards irrespective of where or how they are traded.
- V. The requirement to value collateral should not be daily but should reflect the type and liquidity of the collateral. Liquid traded instruments will generally be valued on a daily basis but in cases where collateral is illiquid, for example real estate or physical commodities; firms should be able to select an appropriate period over which to carry out valuations. It is expected that cases where collateral is illiquid are a small minority and limited to certain asset classes and industry sectors. The vast majority of collateral is highly liquid and valued daily, and frequently in cash. However, proposals covering cleared trades, uncleared trades, Solvency II<sup>4</sup> and other aspects of Basel III may cause a “collateral shock” whereby demand for certain classes of collateral will increase significantly. In certain currencies estimates are that insufficient government debt exists to satisfy the likely demand. The Industry therefore urges regulators to permit, where appropriate, the widest possible definition of collateral consistent with the objectives of The Paper. This should include, without limitation, standby letters of credit and/ or commercial bank guarantees, especially in the case of non-banking

---

<sup>3</sup> Basel III; A global regulatory framework for more resilient banks and banking systems, December 2010 (Revised June 2011)

<sup>4</sup>DIRECTIVE 2009/138/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 25 November 2009 on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II)

parties who may have significant real assets, strong balance sheets and, in many cases, high credit ratings but have less ready access to more liquid forms of collateral than banking groups as set out in IX below.

- VI. Although segregation of IM is not explicitly addressed in the Paper, The Industry believes that it is important for the safety, security and liquidity of OTC markets that any segregation requirements are appropriately calibrated. We believe that segregation arrangements in respect of IM should be offered to all counterparties however the details should be a matter for agreement between the counterparties.. A suitable period needs to be allowed for these arrangements to be phased in. It is also unclear how posting of cash IM outside a CCP would be treated under Basel III. Under current rules this would create an exposure to the custodian (or the counterparty if segregated in their books), which could materially increase risk weighted assets. We understand the term “segregation” in the Paper to apply to the segregation of IM.
- VII. Many end users do not have the liquid marketable collateral used to support bilateral margining practices in the market today. Transformation of non-standard collateral types through repo lines will put further pressure on bank balance sheets in an environment where the European Central Bank LTRO is required to facilitate even interbank liquidity. Furthermore, if these repo lines are not committed, they will typically be the first credit lines to be cancelled in a stressed market, leading to systemic effects as firms are forced to sell liquid or long-term investments. In addition, imposing restrictive collateral requirements on robust credit-worthy non-banking entities with a strong asset base may force them to seek liquidity from banking groups in order to fund margin payments, thus contributing to the liquidity squeeze and further concentrating exposures in the same places across the market i.e. within the banking sector.
- VIII. Regulations will need to be phased in over a period of time, and not applied retrospectively. Those categories of contract subject to phase-in should not also be made subject to the same high capital charges as those applied to other non-cleared trades. If a long phase-in period is imposed on a class of contract then any higher capital charge for non-cleared contracts (which is intended to incentivise clearing) should not apply until the relevant phase-in deadline for that category has passed, so that the higher charge only applies to

those trades earmarked for phase-in which remain uncleared after the phase-in period has ended.

- IX. We also note that more work is needed in a regulatory framework to collateralise transactions with third-country counterparties, especially in jurisdictions where netting and collateral is not enforceable at present. In such jurisdictions the posting of additional collateral can increase, rather than decrease, risk.
- X. Finally, the Industry believes that Special Purpose Vehicles (“SPVs”) should be exempt from all bilateral collateralisation requirements, including the posting of VM as they fall within the hedging exemption. This point was made at page 15 of the joint response to the ESMA<sup>5</sup> paper on OTC Derivatives, CCPs and Trade Repositories dated 20 March 2012.

## **B. Background**

We set out in this section background to certain practices surrounding OTC trades together with risk mitigation including collateralisation. We believe that such an understanding is important to underpin our responses to the specific questions which follow.

The risk in bilateral OTC derivatives consists of two broad categories: (a) current exposure, which is typically equal to the netted mark-to-market value of transactions minus collateral held in each netting set; and (b) potential future exposure<sup>6</sup>, which is the additional exposure that can arise between the time that the last delivery of collateral is received and the time that the MTM claim upon closeout is crystallized<sup>7</sup>.

As general principles of sound prudential risk management, we believe that:

- (a) Current exposure should be covered by daily movements of VM collateral subject to thresholds.
- (b) Potential exposure should be covered by capital, or if a firm prefers by IM collateral. This may be taken in the form of standby letters of credit and/ or commercial bank guarantees in respect of non-banking parties who may have significant real assets, strong balance sheets

---

<sup>5</sup> European Securities Markets Authority

<sup>6</sup> Potential future exposure is frequently estimated using a percentage of the notional amount where the potential reflects the asset type and volatility

<sup>7</sup> Sometimes known as the Margin Period of Risk, this interval includes the time to recognize that an anticipated collateral delivery has not arrived, to make the decision to issue a notice of a potential event of default, to deliver the notice, to permit the contractual period allowed to remedy a failure to elapse without resolution, to deliver a notice of default, and to terminate the trades in the portfolio. The total period can depend on the counterparty and the types of trade and range from a few hours to several days. Most firms make conservative modeling assumptions in assessing risk that Cure Periods will be between 7 and 15 days.

and, in many cases, high credit ratings but have less ready access to more liquid forms of collateral than those within banking groups.

- (c) Supervisors should receive regular and comprehensive reports regarding current exposure and the status of outstanding disputes
- (d) Bilateral OTC portfolios should be reconciled on a regular basis and supported by robust dispute management procedures.

These principles reflect a combination of “defaulter pays” and capital-based protection that provides important flexibility to address the unique needs of different types of market participants across the broad OTC derivatives market, within a common collateralization framework such as the Credit Support Annexes (“CSA’s”) published by ISDA that have been predominantly adopted internationally. We believe that having a common framework for collateral has contributed greatly to the spread of collateralization as a sound risk management practice since the first CSA was published in 1994.

The industry has extensive experience over the past 20 years where this hybrid approach has worked well, and even during the credit market stress of 2007/2008 the counterparty losses that occurred<sup>8</sup> were well-contained within the combination of collateral received plus capital available to absorb losses<sup>9</sup>. While the model can be refined and improved, fundamentally it is sound; we note that international regulators concur with this assessment and that the proposals for bilateral margining in the US and Europe, and the Basel III rules all acknowledge and reflect the credit risk mitigating effects of collateral and capital, and allow for some equivalence between them.

Importantly, however, we differ with some of the proposals which would mandate the coverage of potential exposure with IM. We strongly believe that this should not be a statutory or regulatory requirement, but rather one tool available, alongside capital, and the current supervisory dispute reporting procedures to mitigate credit risk. A “one size fits all” IM regime does not distinguish between different counterparties in term of size, creditworthiness or concentration of risk. Firms’ current IM arrangements, however, do consider these factors.

In the period since the credit crisis firms have become much more sophisticated in managing counterparty credit risk. Credit Valuation Adjustment<sup>10</sup> (“CVA”) desks have been established to

---

<sup>8</sup> There were well known exceptions where excessive concentrations of credit default swaps were incurred. Such concentrations are now visible to regulators through Trade Repositories introduced by the Industry.

<sup>9</sup> In the case of FX, the use of CSAs in supporting the resilience of the FX market during 2007/2008 has been well documented. Given the significant benefits offered by the use of CSAs to further mitigate credit risk in FX, the Foreign Exchange Committee (FXC) updated its core best-practice guidance documents surrounding their use. *See FXC, Tools for Mitigating Credit Risk in Foreign Exchange Transactions*, November 2010. The FXC includes representatives of major financial institutions engaged in FX trading and is sponsored by the Federal Reserve Bank of New York.

<sup>10</sup> CVA is the profit and loss effect on a portfolio of OTC derivatives or Secured Financing Transactions arising from marking to market a firm’s credit and that of its counterparties.

centrally manage and offset the credit risks arising from OTC derivatives and Secured Financing Transactions. Credit and market hedges are used to manage these risks, and have been very successful in offsetting the aggregate credit exposures in their books. In addition, valuation reserves are taken against illiquid positions. Also, firms have built integrated systems to manage counterparty risk and fund derivative positions. The forced segregation of IM threatens some of these models and should be a matter for agreement between the parties.

We also note that firms generally use a portfolio approach similar to lending (as highlighted by Basel II which capitalises counterparty risk similarly to loans) – an expected loss due to defaults is priced into the transactions in their portfolio. With large counterparties, firms can and do buy Credit Default Swaps (“CDS”) protection to further insure against default and to mitigate CVA volatility. One should also note that extension of credit is a key function of a bank and should not be discouraged – be the credit extension a traditional lending credit line or a derivatives credit line. In short firms have a number of risk management tools available to mitigate the risk from OTC trades other than simple collateralisation.

We appreciate and support the public policy of directing more derivatives towards clearing or Central Counterparty (“CCP”) arrangements where appropriate<sup>11</sup>. We also note that CCP’s generally insist upon IM requirements from clearing members, and therefore there is a perception that this directional momentum towards clearing would be undermined if uncleared derivatives did not have IM requirements that were at least as demanding. However there are important differences between the CCP and bilateral models. CCP’s require IM because they do not have sufficient capital to absorb all losses without recourse to the default fund. CCP’s are primarily focused on risk minimisation and have adopted capital models accordingly.

By contrast, in the bilateral part of the market, firms are not at risk that their capital will be depleted by absorbing the mutualised losses of others. Therefore the dividing line between the tranche of loss covered by defaulter pays collateral and the tranche covered by a firm’s own capital can be drawn in a different place; in some cases firms may insist on IM on a bilateral transaction because they want more of the total loss to be covered by the defaulter, and in other cases they are more willing to put their capital at risk. This explains why bilateral collateralization has been safely and effectively used with all kinds of entities from private individuals to the debt management offices of the largest nations. We do not claim that clearing is better or worse than proper bilateral risk management, just that they are different; and therefore that IM requirements can be legitimately different in the two contexts without necessarily promoting or undermining one with respect to the other.

In the capital based model a firm knows that not all of its counterparties will default at the same time, and therefore due to this portfolio effect the amount of capital needed to absorb potential losses (defined with a high and specified degree of confidence) will be less than the aggregate amount of IM that potential defaulters would have to deliver in the defaulter pays model. From a

---

<sup>11</sup> As noted in the ESMA recitals, directing certain OTC derivative products to clearing may not be appropriate; while CCP clearing specifically addresses counterparty risk, it may not be the optimal solution for dealing with FX forwards and FX swaps where the main risk is settlement risk. With this in mind, margin and capital requirements for such products should either not apply, or should be set at levels that do not incentive clearing for such products because this could very well increase rather than decrease potential systemic risk, especially in times of crisis.

global economic perspective, capital based models lock up far fewer resources than defaulter pays IM based models; the resources left unencumbered as a result can be deployed to further the business and invest in the wider economy.

For banks subject to the Basel III regime, this provides a framework in which capital and collateral equivalency can be calibrated. We believe that the appropriate baseline is that current exposure should be covered by daily Variation Margin calls (subject to a threshold) and that potential exposure should be covered by capital. If two parties decided to use IM to mitigate risk (potential future exposure), this should result in a reduction (not one-for-one, due to the portfolio effect) in the amount of capital that needs to be held. The market will naturally optimize between IM and capital, taking into consideration client preferences and risk tolerances.

It should also be acknowledged that the current Over the Counter Derivatives Supervisors' Group ("ODSG") supervisory dispute reporting process which tracks and reports on a monthly basis G-14 member firms collateral disputes of USD \$15mm or greater aging 15 days or more from a cumulative age of dispute perspective provides for unprecedented transparency to regulators giving them the ability to pro-actively query any collateral dispute before it could become systemically significant.

There have also been significant queries raised from by members on the applicability of the regulations to SPVs and other legal entities:

- The treatment of OTC derivatives entered into by special purpose companies or equivalent structured finance vehicles used in securitizations and as structured note issuance vehicles requires particular clarification. Many of these vehicles will not meet the definition of a financial counterparty in EMIR (noting that there is no express exemption in EMIR, unlike the AIFMD, for securitization vehicles) nor benefit from the intra-group exemption from the mandatory clearing and bilateral collateralization obligations and will, therefore, be treated as non-financial counterparties. Such entities will enter into OTC derivatives as part of their commercial activity and such derivatives will be objectively measurable as reducing its risks directly related to such activity. Specifically, such vehicles would not be able to execute their normal business (debt issuance) without such hedges being put in place; the OTC derivative will typically provide the primary source of funds to service the vehicle's debt obligations and other liabilities. In ISDA's view, such vehicles should be able to avail themselves of the hedging exemption for nonfinancial counterparties, as they are not using the derivative for the purpose of speculation, investing or trading. Failure to address this with certainty will risk the viability of the European securitisation and structured debt markets.
- It should be made clear that this exclusion should not be based on the specific circumstances of the legal entity in question, but more the ultimate parent. This would avoid inadvertently requiring the clearing of entities such as Special Purpose Vehicles as well as financial counterparty-like entities such as treasury centres.
- For the reasons described above, we also believe that SPVs should be exempted from EMIR bilateral collateralisation rules (just as other non-financials falling below the clearing threshold would also be exempted from bilateral collateralisation rules).



## Annex - Summary of Questions for the Consultation

### **Q1. What effect would the proposals outlined in this discussion paper have on the risk management of insurers and institutions for occupational retirement provision (IORPs)?**

*For all major OTC dealers collateral is largely symmetrical - meaning they will seek to obtain collateral from counterparties to match collateral that they have to deliver out to other counterparties. Therefore, any increased requirement to collect collateral will have the largest impact on end-user transactions. It follows that insurers and pension management firms will have to post more collateral. This makes it less likely that they will hedge all of their risk, and thus both exposes them to greater risk of loss and higher costs, which will be passed onto private customers in the form of higher premiums, riskier providers of insurance and pensions, and lower pension returns for retirees.*

*Pension funds and insurers are largely directional in their use of derivatives and IM can reach significant percentages of overall notional which will adversely affect their investment performances. Regulators have acknowledged that, in the case of pension funds and insurers, collateral may be wrong-way, concentrated and illiquid. This puts pressure on bank balance sheets and liquidity coverage ratios.*

*End-users may concentrate business within certain counterparties and CCP's to maximise margin efficiency. As a result both dealers and CCP's may be more exposed to counterparty trade concentrations than they are currently.*

### **Options for Initial Margin**

#### **Summary of Proposals**

#### **On Option 1: The Posting of IM by all Counterparties**

### **Q2. What are your views regarding option 1 (general initial margin requirement)?**

*The Industry does not support the requirement that all firms post IM because the proposal takes a one-size fits all approach to risk mitigation and does not adequately take into consideration other risk mitigants including the BASEL III capital requirements, collateral reconciliation and ODSG reporting and resolution procedures. The IM requirement is overly burdensome, will unnecessarily increase costs and cause a very significant liquidity drain. The key is to strike an appropriate balance between risk reduction and cost, clearly further work needs to be undertaken in this area.*

*It is therefore important to view the Initial Margin requirement in the context of industry business practices implemented within the existing ODSG process since the fall of AIG combined with other proposed and industry supported legislation designed to reduce systemic risk; including but not limited to:*

- a. *Enhanced Procedures for the resolution of collateral disputes (collectively referred to as the Dispute Resolution Documents): Over the last two years, ISDA and OTC market participants*

*have successfully collaborated to draft the Dispute Resolution Documents which put forth a step-by-step process to quickly and effectively resolve collateral disputes;*

- b. Supervisory Dispute Reporting: Once a month since January 2011, ODSG supervisors receive a monthly report from G-14 member firms which details their collateral disputes of \$15mm USD or greater and aged 15 days or more enabling regulators vital transparency to observe and question any collateral dispute before it grows into a systemic issue.*
- c. The proposed CFTC and EMIR requirements to centrally clear OTC Derivatives where significant liquidity and standardization exists to do so.*

*Dynamic IM creates the need to hold excess cash to mitigate IM volatility, further trapping liquidity and forming a drag on client performance. Systemic risk will be increased as IM increases will occur simultaneously in a stressed market as opposed to spread out over a period of time as occurs at present.*

*In addition it should be noted that NFCs, and commodity trading firms within the non-banking (e.g. energy) sector, use OTC derivatives to mitigate commercial risks arising from the underlying activity of these firms. We would welcome clarity from the ESAs that, by referencing the clearing threshold, the requirement for NFCs to exchange collateral as required by Art 6.1b does not apply to transactions that are objectively measurable as reducing risks directly related to the commercial risk or treasury financing risks of the group. We believe this is the policy in the US, as embodied in the "end-user exemption" to requirements for clear or collateralise swaps which are used to 'hedge or mitigate commercial risks'. As acknowledged by the CFTC, 'requiring end-users to divert scarce capital to margin would increase risk, rather than reduce it, by making hedging more expensive and thus less likely to occur.' It would also impose unequal trading and capital costs to undertaking OTC transactions between the US and Europe, thus leading to a migration of such transactions to US entities / markets. Imposing IM on "risk-reducing" transactions will inevitably drive up the capital cost of, and dis-incentivise NFCs from undertaking such transactions. So while "systemic" risk may reduce, "commercial" risk may rise instead. We should urge the ESAs to clarify their position and exercise caution in imposing such radical measures which may have unintended and far-reaching consequences.*

### **Q3. Could PRFCs adequately protect against default without collecting initial margins?**

*A PRFC's ability to collect Initial Margin represents one key tool in the risk mitigation tool-kit. Different business opportunities present firms with decisions about how and whether to allocate capital to generate revenue. Enabling firms to make their own decisions about risk is fundamental to each OTC market participant. ISDA believes that the end goal of global financial stability lies in the ability of each OTC market participant to make their own risk-mitigation decisions within a clearly defined set of sound business practices and regulatory requirements including the measurement and mitigation of counterparty credit risk using capital and other risk transfer instruments as well as IM. The issue is not limited to preventing default but about managing risk without the sole mitigant of initial margins.*

*With cleared trades a CCP looks to VM and IM for loss protection. For bilateral trades firms are also required to hold regulatory capital and therefore to impose IM in addition is over conservative and not warranted by any other risk.*

*As stated in section B in a bilateral world dealers frequently have access to other risk mitigants which arise through other trading relationships with counterparties. These allow firms additional choices to mitigate wrong way risk.*

**Q4. What are the cost implications of a requirement for PRFC, NPRFC and NFCs+ to post and collect appropriate initial margin? If possible, please provide estimates of opportunity costs of collateral and other incremental compliance cost that may arise from the requirement.**

*The amount of liquidity that two-way IM could eventually drain from the industry is very significant. To provide a sense of scale, a recently completed study of Initial Margin requirements conducted by a major broker dealer, concluded that the implementation of two way IM requirements for the 35 largest derivative trading firms, if applied to each firms existing bilateral OTC book of business would total approximately US\$2.8 trillion. Collateral requirements on this scale would fundamentally alter the costs of collateral and the economics of transactions.*

*ISDA submitted a letter in relation to the US Dodd-Frank Act which estimates the macro-economic impact of additional initial margin at US\$1 trillion as well as the costs associated with additional collateral arrangement as US\$142 million over almost 2 years. A further cost will arise in relation to arranging protection against third party custodians.*

*Moreover, these assets, if posted under currently proposed rules would be held in segregation at 3rd party custodians without the opportunity for rehypothecation; assets that would otherwise be used to lend to businesses for capital improvements, business expansion and employment growth.*

*The one-time incremental costs for retro-fitting the collateral systems (or vendor packages) of only the 35 largest derivative trading firms to accommodate two-way IM are estimated at well over US\$200 mm. In Europe The current cost to a dealer of setting up third party custody arrangements for pledging initial margin is in the order of EUR 15-20,000 per counterparty in external legal costs alone, although it can stretch to EUR 50,000 for parties unfamiliar with the documents .*

**On Option 2: The collection of IM by PRFCs only**

**Q5. What are your views regarding option 2?**

*While ISDA believes that option 2, as proposed by the ESA, is a slight improvement over option 1 in that PRFCs are no longer required to post IM to non PRFC firms. Option 2, however, still imposes a one size fits all approach to the question of whether IM is appropriate and also imposes unnecessary and overly burdensome liquidity and cost requirements on PRFC firms.*

**Q6. How – in your opinion - would the proposal of limiting the requirement to post initial margin to NPRFCs and NFCs+, impact the market / competition?**

*On Option 3: PRFCs would not be required to collect IM if the exposure is to certain counterparties and below a certain threshold. There might be an impact on pricing, as the capital requirements for such highly collateralised transactions would be lower. However this would be compensated for the NPRFC and NFC+ by the liquidity cost. As stated before, we advocate that the choice of IM level should be a bilateral decision of the counterparties.*

*Most firms use internal models for review of the credit quality of their clients, and not rely solely on external ratings.*

*Custodian accounts frequently have up-front and annual charges in addition to other fees. These costs will be passed on to clients and in consequence the costs of imposing margins on small clients will be relatively expensive.*

Certain pre-existing contractual conditions may prevent the posting of IM. For example a Negative Pledge provision in a bond issuance document, which (depending on how it is drafted) can make it a breach of a bond covenant if an issuer were to use it to post collateral for unrelated OTC derivative or other transactions.

**Q7. What is the current practice in this respect, e.g.**

**- If a threshold is currently in place, for which contracts and counterparties, is it used?**

*Thresholds are commonly used for all kinds of counterparties, although there has been a secular move over a number of years trending towards lower thresholds driven in part by capital efficiency considerations under the evolving Basel rules. A significant subset of collateral agreements have zero thresholds, and under the new industry-developed Standard Credit Support Annex the threshold will be eliminated; note that this document will be optional for market participants, therefore some use of thresholds will continue.*

**- Which criteria are currently the bases for the calculation of the threshold?**

*Normal credit assessment criteria are used. For any counterparty there will be some amount of unsecured risk that a bank will find acceptable, in the range from zero upwards. This would be true for loans and other types of transaction, and therefore also true for exposure taken in the form of OTC derivatives. If a bank would be willing to lend a corporate \$100 unsecured, then it is reasonable for derivatives between those parties to also have an unsecured threshold of \$100. There is little logic in constructing a regime under which a client can be granted credit for instruments such as loans but not for OTC derivatives. It should also be noted that it is common practice is to apply the threshold to the net IM and VM requirement.*

**Q8. For which types of counterparties should a threshold be applicable?**

*Whichever ones the PRFC thinks appropriate in the circumstances. Unsecured thresholds will attract additional capital charges, so as to protect the PRFC against counterparty default.*

*The Dodd Frank proposals set "low risk" financial entity thresholds (estimated between US\$15-45mn) as well as allowing for swap dealing entities to determine appropriate thresholds for "non-financial" entities. Although ISDA has argued that thresholds should not be set by counterparty type, firms should be able to use models to measure individual counterparty risks and differentiate in this manner.*

**Q9. How should the threshold be calculated? Should it be capped at a fixed amount and/ or should it be linked to certain criteria the counterparty should meet?**

*ISDA believes that the threshold should be calculated based on the credit risk and commercial judgment of the firms concerned. Such practice will be adequately capitalised by the counterparty credit requirements of the Basel III regime.*

**Q10. How – in your opinion - would a threshold change transactions and business models?**

*The imposition of a threshold would not change the nature of existing transactions or business models. As mentioned above in the answer to question 7, thresholds are commonly used today for all kinds of counterparties, although there has been a secular move over a number of years trending towards lower thresholds driven in part by capital efficiency considerations under the evolving Basel rules.*

**On All Options:**

**Q11. Are there any further options that the ESAs should consider?**

*Firms should be able to use their own models and judgement to mitigate the counterparty credit risk arising from uncleared OTC derivatives through IM, VM subject to a threshold, capital or other risk mitigation techniques.*

*As mentioned above, in the case of certain FX trades, an exemption from clearing has been proposed in the United States. This determination would have the effect of excluding FX forwards and FX swaps products from the definition of "swaps" (effectively the equivalent of "OTC derivatives" in Europe). As a result, FX forwards and FX swaps would not only be exempt from mandatory clearing and/or trading requirements, but also any mandatory margin or capital requirements that may apply to "uncleared swaps". We agree with and support this approach, and believe the overriding objectives for regulators internationally should be to implement measures that are proportionate to the systemic risks being addressed.*

**Q12. Are there any particular areas where regulatory arbitrage is of concern?**

*The principal concern surrounds differing implementations of the Basel III proposals in different jurisdictions. Of particular concern is the unlevel playing field being created between European and US jurisdictions. It is inefficient and costly to incentivise firms to rework their business models due to differing regulatory constructs in different jurisdictions. The Industry urges regulators to work internationally to develop uniform models wherever possible.*

*On a wider point we also note differences between aspects of EMIR<sup>12</sup>, Dodd Frank and Asian jurisdictions. Differing definitions of eligible collateral will also encourage arbitrage.*

**Q13. What impacts on markets, transactions and business models do you expect from the proposals?**

*Firms accept the need to ensure that bilateral OTC derivatives should be supported by an appropriate amount of capital. This may take the form of IM, VM subject to a threshold or other forms including the firm's own capital. If a model were to be imposed requiring IM and VM alone, then distortions increased costs and reduced access to end users to risk management tools. Certain transactions may also be structured into jurisdictions less hostile to business.*

*More liquidity will be locked away for IM especially if this is done mechanically under a mandatory one-size-fits-all rule, and fewer funds will be available for 'productive' use in the economy. This would equal a forced lending programme to EU governments by the financial sector and the wider economy.*

*Such distortions would be most significant in a market stress event when IM models, particularly VaR style models contemplated by regulators incorporate the stress events. IM will then jump at the same time as significant VM calls are made. The resulting procyclicality together with restrictions on the eligibility of collateral will lead to a significant increase in systemic risk as risky assets are liquidated to fund IM and VM calls.*

**Q14. As the valuation of the outstanding contract is required on a daily basis, should there also be the requirement of a daily exchange of collateral? If not, in which situations should a daily exchange of collateral not be required?**

*Yes, subject to a de-minimis Minimum Transfer Amount to avoid the cost of small movements of collateral that convey no appreciable risk protection. CFTC have suggested \$100,000 equivalent for this purpose. Firms should also have the ability to use thresholds below which risks are covered by capital.*

**Q15. What would be the cost implications of a daily exchange of collateral?**

*As the overwhelming majority of OTC market participants already currently exchange collateral on a daily or weekly basis, ISDA believes that the cost implications of moving to daily, while not immaterial, would not be significant for existing dealers, and well worth the additional risk mitigation. However, end users subject to daily margining for the first time may face significant costs and lead times of nine months or more to implement the necessary systems. This implementation period cannot start until all market participants, including end users, fully understand the regulations and their impact on individual firms.*

**Q16. Do you think that the "Mark-to-market method" and/or the "Standardized Method" as set out in the CRR are reasonable standardized approaches for the calculation of initial margin requirements?**

---

<sup>12</sup> European Market Infrastructure Regulation

*ISDA believes that the calculation of Initial Margin requirements should be based on the credit risk and commercial judgment of the firms concerned. To impose a one size fits all approach to IM is flawed with far reaching implications on global liquidity and the broader economy. IM is intended to immunise one party to a contract from a period (the margin period of risk) of market movements which result in other party being unable to settle. It follows that the appropriate period of risk and level of IM will depend on market conditions, the type of contract and counterparty and degree of certainty required.*

*The mark-to-market method, the standardised method and the internal models method were developed for a different use. To calculate initial margin levels one might pick another percentile than the average over non-negative scenarios, but will pick a shorter time horizon than one year. As noted in other responses by industry, e.g. to BCBS206, the mark-to-market method is a very risk insensitive method that does not take netting and collateral into account very well.*

*Firms that elect to charge IM will often compute this requirement across both cleared and non-cleared derivatives, exchange-traded and securities financing activities and in doing so reflect both economic offsets between different products exposed to the same risk factors and the right of setoff across different types of exposures where enforceable under netting agreements (such as the ISDA Bridge). Neither the Standardised Method or Mark-to-Market method cater for this common type of risk mitigation approach.*

*Other possibilities would be a VaR type calculation, a rules based approach or a calculation based on stressed scenarios as used in the hedge fund space. However insistence on VaR type models for IM might create barriers to entry for many smaller banks who will find the costs prohibitive for building their own VaR models that can generate timely margin requirements on a daily basis by client and product.*

*The Industry recognises regulators' desires to introduce standardisation where appropriate and agree that certain parameters such a confidence intervals etc. can be subject to the same sort of standardisation as applies in CCP IM calculations.*

*In June 2011 ISDA published a paper<sup>13</sup> which clearly shows that the Current Exposure Method ("CEM") is inappropriate for estimating the risk in all but the simplest portfolios.*

**Q17. Are there in your view additional alternatives to specify the manner in which an OTC derivative counterparty may calculate initial margin requirements?**

*See the answer to question 16 above. Further other models exist such as where clients post an independent amount and when the Mark to Market ("MTM") of the portfolio reaches a predetermined percentage of collateral posted, the client is invited to post more or the dealer unilaterally unwinds part of the portfolio to return the MTM below the threshold.*

*See also the response to question 11.*

---

<sup>13</sup> ISDA Research Notes, A Note on the Impossibility of Correctly Calibrating the Current Exposure Method for Large OTC Derivatives Portfolios, June 2011 available at: <http://www2.isda.org/search?keyword=CEM>

**Q18. What are the current practices with respect to the periodic or event-triggered recalculation of the initial margin?**

*Firms should have the ability to alter margin levels in response to market conditions and observed levels of volatility in specific instruments or asset classes. See also the points made under question 2 above.*

**Q19. Should the scope of entities that may be allowed to use an internal model be limited to PRFCs?**

*No. Internal models, not restricted to IMM, should be permitted for regulated entities subject to supervisory approval. The determinant should be the level of sophistication of the counterparties and not how they are regulated.*

**Q20. Do you think that the “Internal Model Method” as set out in the CRR is a reasonable internal approach for the calculation of initial margin requirements?**

*The IMM is a reasonable approach for the calculation of initial margin requirements although firms should be able to use their own models and credit judgement where appropriate. IMM is not necessarily the best approach, but is one of several.*

**Q21. Do you think that internal models as foreseen under Solvency II could be applied, after adequate adjustment to be defined to the internal model framework, to calculate initial margin? What are the practical difficulties? What are the adjustments of the Solvency II internal models that you see as necessary?**

*The Industry does not have a view on this*

**Q22. What are the incremental compliance costs (one-off/on-going) of setting up appropriate internal models?**

*Existing dealers mostly have models already in place. Additional costs will be borne by end users or participants who are forced to use IM for the first time. These costs and systems implementation lead times can be very substantial. Further, the costs needed to obtain supervisory approval may also be substantial based on our experience with IMM and other models.*

*The ISDA comment letter on the Dodd Frank proposals noted significant time and monetary costs related to technical and operational implementation required: to develop & test models, create appropriate infrastructure and controls to support the data feeds needed for IM, segregation and connectivity with custodians, etc. Specific expertise will be needed in the collateral operations and client service space to deal with end-users in the valuation and dispute process. Also, the short timeframe to compliance in January 2013 will place significant stress on limited resources so as to increase the likelihood of deadlines not being met.*

**Q23. To what extent would the „mark-to-market method” or the „standardized method” change market practices?**

*The Mark to Market method is not very risk sensitive and could lead to wrong incentives for counterparties who use this. Netting is not properly reflected.*



**Q24. Do you see practical problems if there are discrepancies in the calculation of the IM amounts? If so, please explain.**

*In the current bilateral world firms already face discrepancies in the calculation of collateral. Firms should be able to agree on the calculation methodology or agree which party to a contract carries out the calculation. In the case of a dealer and an end user, documentation typically specifies that the dealer carries out the calculation and there are procedures to be followed in cases of dispute.*

**Q24. Do you see practical problems if there are discrepancies in the calculation of the IM amounts? If so, please explain.**

*Similar to valuation, there will be discrepancies, and similar mechanisms as already available in collateral management today are needed for IM. There is also the possibility of increased disputes as clients have to deal with differing methodologies used by dealers which are not transparent.*

**Q25. Would it be a feasible option allowing the party authorized to use an internal model to calculate the IM for both counterparties?**

*Parties should be free to agree that one or other carries out the calculation but this would be unworkable if imposed unilaterally.*

**Q26. Do you see other options for treating such differences?**

*See the responses to questions 22 and 23 above.*

**Q27. What kinds of segregation (e.g., in a segregated account, at an independent third party custodian, etc.) should be possible? What are, in your perspective, the advantages and disadvantages of such segregation?**

*See the IA paper and the answer to question 29 below.*

**Q28. If segregation was required what could, in your view, be a possible/adequate treatment of cash collateral?**

*Segregation depends on local law and insolvency regulation in each jurisdiction. As has been experienced in the Lehman and MF Global cases local law, and the interaction between the laws of different jurisdictions can be lengthy and complex. It should also be noted that in both cases which involved cleared derivatives, clients suffered losses whereas clearing members did not.*

*It is impossible for industry to provide this certainty. To support more collateralisation, lawmakers need to step in and push harmonisation of bankruptcy legislation.*

*Segregation should be offered, but not mandatory. ESMA and EBA should be aware that mandating segregation would substantially increase the cost of doing business for NFCs and commodity trading firms within the non-banking sector. If also made applicable to (smaller) NFCs, the additional cost for trading and resulting liquidity constraint might easily push smaller parties out of the market altogether.*

*Requiring companies to apply segregation would increase the following costs:*

- cost of tying up liquidity for segregation;

- cost of additional borrowing to fulfil segregation requirements; and
- cost attached to the segregation itself (systems have to be installed).

*For margining, The Industry believes that the posting of cash collateral (at the very least in the case of VM) should occur by outright transfer of ownership and not by way of security. Otherwise, margining will tie up an unacceptable amount of liquidity (which not all NFCs+ and commodity trading firms within the non-banking sector have readily available for margining).*

*Any regime mandating posting of IM will lead to significantly higher credit risk for those required to post collateral unless all Member States have regulatory rules and bodies that can:*

- effectively supervise and enforce segregation requirements; and
- ensure unhindered and timely recovery of collateral by non-defaulting parties.

*This aspect poses even greater concern should IM be required to be posted outside the EU when transacting with non-EU counterparties. The recent liquidation of MF Global has demonstrated how challenging it can be even for relatively sophisticated jurisdictions to ensure adequate protection of segregated assets. However, as The Paper suggests “for IM to be effective, it should be held segregated”. It follows that posting of IM should not be mandated unless parties can be confident that the required harmonisation of local law and insolvency regimes is in place and effective, at the very minimum across the EU.*

#### **Q29. What are the practical problems with Tri-Party transactions?**

*IM segregation is complex and difficulties can arise depending upon the entity type and the law and regulation applicable. Moreover, pre-existing contractual obligations may exist that would prevent the posting of IM. The aim of ensuring that the non-defaulting party can get their IM back promptly cannot be guaranteed due to local insolvency law. There is a risk that the amount of IM subject to dispute in insolvency may increase if firms are required to post increased levels of collateral. Additionally, the current offerings from custodians need further refinement in order to prevent IM from being removed from the accounts without appropriate validation.*

*A further risk is one of concentration. All G16 major banks and derivative dealers are clearing members of many CCP's. If requirement force firms to hold increased levels of IM, then this will be placed with the G16 banks and dealers thus increasing concentration and systemic risks.*

*It is also unclear how posting of cash IM outside a CCP would be treated under Basel III. Under current rules this would be an exposure to the custodian (or the counterparty if somehow segregated in their books), which will materially increase risk weighted assets.*

#### **Q30. What are current practices regarding the re-use of received collateral?**

*Received collateral is generally filtered into those assets which are contractually permitted to be re-used, and those which are not. All assets subject to title transfer forms of collateral agreement may be re-used; any assets subject to security interest forms of collateral agreement where rehypothecation rights have been granted may also be re-used. Any assets received under security interest agreements without rehypothecation rights cannot be re-used, and according to applicable contract terms and regulatory rules may need to be held in designated client money or segregated*

accounts. It is important that assets subject to title transfer are not held in client money or segregated accounts, because this would be incompatible with their status of having had title in the asset transfer to the receiving party - if one owns an asset, one does not generally hold it in a client account.

Firms generally aim to re-use as much collateral as possible, subject to their rights. Exceptions to this would be some types of assets that are not readily re-used, and other types where re-use is possible but recall risk is elevated. This is more relevant for VM where collateral received is frequently paid out. See comments with regard to full title transfer of cash collateral as VM in response to Q28 above. For IM, however, rehypothecation brings additional legal and other risks which need to be examined further.

**Q31. What will be the impact if re-use of collateral was no longer possible?**

*A significant increase in need for and cost of collateral.*

1. *Without rehypothecation and with mandatory segregation, English CSAs will be subject to the risk of challenge and re-characterization as improperly documented and unperfected security interest agreements.*
2. *Also, increased systemic risk as collateral is held by market dominant third party custodians.*

**Q32. What are, in your view, the advantages and disadvantages of the two options?**

*Option 1 would impose specific CCP collateral requirements on the bilateral market. CCPs need very liquid collateral so that they can manage a default in a very short period without having to use the mutualised resources. However, in the case of creditworthy non-banking parties who may have significant real assets, strong balance sheets and, in many cases, high credit ratings but have less ready access to more liquid forms of collateral such as cash than those within banking groups, it may make sense to be able to take IM for CCP collateral arrangements in the form of standby letters of credit and/ or commercial bank guarantees. On the other hand, for bilateral transactions the counterparties do have capital that they can use as a short term buffer to cover the period until the collateral of a defaulted counterparty has been liquidated.*

**Q33. Should there be a broader range of eligible collateral, including also other assets (including non-financial assets)? If so which kind of assets should be included? Should a broader range of collateral be restricted to certain types of counterparties?**

*It should be in the judgment of counterparties to decide what is acceptable, with appropriate haircuts the adequacy of which can be reviewed by supervisors via vertical or horizontal reviews. We note that collateral recognized for lending transactions includes all manner of plant, machinery, inventory, real estate and other tangible assets including commodities. However, see the response to question 36.*

*The increased use of clearing and Basel III liquidity requirements will generate a huge demand for the same sort of collateral. Taking this into account, regulation should not increase this pressure even more by mandating the same quality of collateral for bilateral transactions. Counterparties should be able to agree what collateral they are willing to accept and apply appropriate haircuts to cater for quality and liquidity. Equally Wrong Way Risk and concentration also need to be factored in to the*

*calculations. As stated above, bilateral collateral does not need to be as liquid as collateral used in CCPs. See also comment regarding non-banking, creditworthy parties in response to Q32.*

*Further if the eligible collateral for bilateral transactions was restricted to only very liquid, high credit quality collateral, clients would make more use of collateral transformation. This would lead to firms actually having the less liquid collateral with lesser credit quality in their repo books – overall no risk would be mitigated compared to accepting the same collateral as collateral with appropriate haircuts.*

*In the case of regulated financial entities, the capital regime already differentiates between different qualities of collateral; more volatile collateral has a less beneficial impact on capital. Such rules are sufficient without the imposition of additional restrictions since any loss of risk reduction is offset by higher capital requirements.*

**Q34. What consequences would changing the range of eligible collateral have for market practices?**

*Any change if the range of eligible collateral would, if applied retro actively to existing contracts, cause serious disruption to markets and very many disputes. Actions which affect the pricing or economics of existing contracts will be very disruptive. Since a wide range of collateral is currently accepted, specific to individual counterparties and contracts, and narrowing of that range will deter hedging though increasing costs and decreasing liquidity. For example OTC derivatives which reference commodities may take, as collateral, the underlying commodities which may yet to be produced or refined and highly illiquid.*

*Existing Credit Support Annexes would require renegotiation. Also being prescriptive as to eligible collateral threatens the bilateral negotiation principle of the OTC market, would reduce liquidity and reduce the ability to effectively mitigate credit risk.*

**Q35. What other criteria and factors could be used to determine eligible collateral?**

*As Q33 – eligible collateral can be less liquid and of lesser credit quality as collateral needed for CCPs, as long as appropriate haircuts are employed. However, care needs to be taken to ensure that the addition of collateral does not simply increase concentration and wrong-way risks.*

**Q36. What is the current practice regarding the frequency of collateral valuation?**

*Daily for liquid traded instruments. Illiquid collateral may be less frequently. However it is accepted that illiquid collateral is limited to certain asset classes and industry sectors which form a small minority of uncleared OTC transactions.*

**Q37. For which types of transactions / counterparties should a daily collateral valuation not be mandatory?**

*Firms frequently agree that, where a dealer holds illiquid collateral subject to a significant haircut, that valuation and exchange of collateral should be less frequent than daily. However, see response to question 36 above. Such collateral is likely to form a small minority of the total and confined to certain asset classes and industry sectors.*

**Q38. What are the cost implications of a more frequent valuation of collateral?**

*Not significant for liquid traded market instruments.*

**Q39. Do you think that counterparties should be allowed to use own estimates of haircuts, subject to the fulfilment of certain minimum requirements?**

*Yes.*

**Q40. Do you support the use of own estimates of haircuts to be limited to PRFCs?**

*The Industry believes that firms should be able to decide the acceptable levels of haircut, the adequacy of which can be reviewed by supervisors via vertical or horizontal reviews.*

*Own estimate to collateral should not be limited to PRFCs, but to counterparties sophisticated enough to estimate the volatility of collateral. In practice, both counterparties would have to agree the haircuts in any case.*

**Q41. In your view, what criteria and factors should be met to ensure counterparties have a robust operational process for the exchange of collateral?**

*In November of 2011, ISDA published the Best Practices for Collateral Operations<sup>14</sup>. The principles articulated in this document reflect the collaborative effort of both buy and sell side OTC market participants and set the operational expectations and standards for both new and existing firms trading OTC derivatives.*

**Q42. What incremental costs do you expect from setting up and maintaining robust operational processes?**

*Any requirement as to mandatory timing of the posting of collateral will have significant cost implications in terms of the development of systems and controls.*

**Q43. What are your views regarding setting a cap for the minimum threshold amount? How should such cap be set?**

*The Industry does not support the idea of a cap on thresholds. Any threshold needs to take into account the size and credit worthiness of both the firm and its counterparties together with other risk mitigation available. Further the asset class and liquidity of the OTC transaction and collateral together with risk appetite and arrangements to centrally manage counterparty credit risk. There is no "one size fits all".*

**Q44. How would setting a cap impact markets, transactions and business models?**

*See the response to question 42.*

---

<sup>14</sup> ISDA Paper, Best Practices for OTC Derivatives Collateral Process, November 2011 available at <http://www2.isda.org/search?keyword=Collateral+>

**Q45. In your views, what should be considered as a practical or legal impediment to the prompt transfer of own funds or repayment of liabilities between the counterparties?**

*In an unstressed market the existing mechanisms work well. However, when one of the counterparties is in default regulatory or legal intervention may become paramount.*

*In terms of what would constitute a practical or legal impediment we suggest that the following factors might be relevant:*

- (1) any exchange, capital controls or taxes that may impact on the transfer or convertibility of funds or performance of contractual obligations;*
- (2) any local regulatory requirements that impact the ability of the undertaking to transfer funds or perform contractual obligations; and*
- (3) whether the undertaking has in the past promptly transferred funds or performed contractual obligations when required to do so.*

*Local regulations such as the FSA Liquidity Regime may also have an impact.*

**Q46. What is the current practice regarding the collateralization of intergroup derivative transactions?**

*This depends upon the legal structure of the group. If the parties are effectively different parts of the same entity, they will generally not capitalise credit risk. However, if the parties are treated as separate legal entities, they may be managed on an arms-length basis. In such cases, exchange of collateral (VM) occurs, and is incentivised by capital rules. This issue also needs to be addressed in the context of resolution planning which will have an impact on the effective segregation of legal vehicles.*

**Q47. What is the impact of the presented options on the capital and collateral requirements of the counterparties affected by the relevant provisions and the span of time necessary to comply with the Regulation?**

*The Industry believes that if the proposals in this response particularly the “no mandatory IM regime” were to be implemented, then disruption to business and costs would be manageable. This is, of course, subject to the regime being finalised and widely understood prior to implementation, and existing trades grandfathered. Any imposition of requirements which are unknown at trade date will upset the pricing and economics of business and may cause trades which were executed as hedges to become ineffective or only partially effective. The legal risks of changing the economics of trades post execution are not acceptable to the industry.*

*Existing banks and major dealers already have systems which will support IM, VM and daily valuation and posting of collateral, where appropriate. However, many non-financial end users do not have such systems and the lead time for implementation may be in excess of nine months after full details of the final rules are published.*

*Third party custody agreements (typically 3 are required) can take up to 3 months to negotiate.*

*If firms were not permitted to use their own credit judgement in setting IM, VM and thresholds but were forced to use liquid collateral or cash, the consequences would be significant. Collateral would become much more expensive, the concentration risks of placing collateral in the system would increase greatly and the costs to non financial end users would make hedging not economically viable for many parts of the real economy.*