September 28, 2012

Secretariat
Basel Committee on Banking Supervision
Bank for International Settlements
Centralbahnplatz 2, CH-4002 Basel, SWITZERLAND
Sent by email to: baselcommittee@bis.org

Secretariat
International Organization of Securities Commissions
C/ Oquendo 12, 28006 Madrid, SPAIN
Sent by email to: wgmr@iosco.org

Re: Consultative Document: "Margin Requirements For Non-Centrally-Cleared Derivatives"

Dear Secretariats,

The International Swaps and Derivatives Association[1] ("**ISDA**") appreciates this opportunity to respond to the Basel Committee on Banking Supervision ("**BCBS**") and the International Organization of Securities Commissions ("**IOSCO**") with respect to the Consultative Document "Margin requirements for non-centrally-cleared derivatives" (the "**Study**") of July 2012.

A. Introduction

ISDA understands the objective expressed by the G20 nations to require over-the-counter ("**OTC**") derivatives to be cleared and for non-cleared trades to be subject to robust operational processes and capital requirements including margin. As such, ISDA is supportive of the Study's three main aims, namely, creating systemic resiliency, promotion of central clearing and the preservation of market and collateral liquidity. Moreover, ISDA

[1] 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 800 member institutions from 54 countries on six continents. Our 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 risks inherent in their core economic activities. For more information, please visit: www.isda.org .

appreciates BCBS's and IOSCO's initiative to tackle these important issues on a global basis, minimizing the potential for regulatory arbitrage among regions. As much as ISDA applauds the principle of using margins to reduce counterparty risk, we are gravely concerned that the severe application of the proposals, as presented in the consultation, has the potential to undermine systemic resiliency by significantly affecting liquidity in financial markets and the general economy. In the following, we summarize ISDA's responses. This is followed by a more detailed development of the responses.

B. Executive Summary

1. ISDA Recommendations:

a. No mandatory initial margin ("IM"): ISDA strongly opposes the requirement for a universal two-way exchange of IM between financial firms and systemically important non-financial firms ("**Covered Entities**") in the way that is described in the Study. The effects of the proposed rules are likely to lead to a significant liquidity drain on the market, estimated to be in the region of US$15.7 trillion to US$29.9 trillion for IM only (see Appendices 1 and 2 for calculations)[2]. The scale of additional collateral should be seen in the light of:

- The size of balance sheets of the Federal Reserve and the ECB (which hold large amounts of collateral) are around $3 trillion.
- The quantitative easing (QE) exercises conducted by the large central have ranged between $0.5 and $1 trillion.
- The capital of the largest 16 banks in the global banking system is around $1 trillion.

Such demands on liquidity could cause enormous pressure on market liquidity with the potential for significant dislocation to the general economy, which makes the imposition of mandatory IM inconsistent with the letter and the spirit of the G20 leaders' recommendation. Furthermore, the proposed IM requirements would have significant pro-cyclical effects in times of stressed financial markets. A better tool for promoting systemic resiliency is the Basel III capital framework.

b. Posting Variation Margin ("VM"): ISDA endorses the collection of VM between Covered Entities as a means to promote systemic resiliency. VM is a practical mechanism which may be used to avoid the accumulation of unrecognized losses with counterparties that could become a source of instability to the system. In fact, VM exchange alone with no thresholds should address systemic resilience concerns.

c. Include provisions to alleviate the negative market impact: If BCBS/IOSCO continue to consider including IM in the margin requirements, we respectfully

[2] It should be noted that these estimates are highly sensitive to the underlying assumptions used and results should be viewed in the context of the assumptions used. However, these estimates are of the same order of magnitude as results arrived at independently by banks that are participating in the Quantitative Impact Study (QIS) by BCBS.

These estimates are reduced to $11.1 trillion and $23.2 trillion respectively if OTC FX derivatives are excluded from the calculations.

urge BCBS/IOSCO to actively seek and include specifications that will lessen the negative effects as described above. For example, narrowing the scope of entities on which IM requirements are imposed would reduce the amount of collateral withdrawn from the markets and could materially lessen the adverse side effects. Additionally, ISDA supports the use of thresholds as a way to mitigate demands on required collateral. Appropriate levels should be commercially negotiated and mutually agreed by the parties. In order to avoid excessively high thresholds, we propose that the aggregate unsecured exposure to non-cleared derivatives of a prudentially regulated entity ("**PRE**") be set in relation to Tier 1 capital. ISDA strongly encourages BCBS/IOSCO to carry out a thorough analysis of the potential impact of margin requirements under consideration before implementation.

2. **Process:**

   a. **Timing:** ISDA urges BCBS/IOSCO to conduct a thorough impact study before imposing margin requirements. As discussed further below, the proposed requirements will have serious negative effects on the markets as a whole, in terms of liquidity drain, collateral demand and transaction costs. The toll of such effects may well outweigh the actual benefits realized. ISDA has done some preliminary work in assessing the consequences and would be happy to assist in further analyses.

      Further, we strongly recommend a long phase-in approach in order to provide market participants with adequate time to prepare and to provide regulators with enough time to properly gauge the impact of the rules and eliminate the potential problems from a premature application of such proposals.

   b. **Existing OTC derivatives:** We ask BCBS/IOSCO to confirm that the margin requirements apply only to derivatives executed on or after the effective date of the requirements, and not to pre-existing transactions.

   c. **Link to Clearing Requirements:** The margin requirements for any class of derivatives should not apply until the clearing mandate for such class is implemented.

3. **Netting**: Netting for VM (and IM, to the extent IM is required) is a well established and fundamental feature of the market for risk management purposes. As such, ISDA strongly recommends that netting is allowed to the full extent it is legally enforceable. In addition, ISDA recommends that portfolio-based margining be permitted, including margining across cleared and non-cleared OTC derivatives and other products and between legal entities.

4. **Inappropriate for Certain Jurisdictions**: Certain jurisdictions, particularly outside the G20, do not have clearing organizations or legal and regulatory systems that support netting and standard collateral arrangements. For OTC derivatives involving such jurisdictions, requirements for IM and VM may be inappropriate and increase the risks of Covered Entities that have counterparties in those jurisdictions. We ask BCBS/IOSCO to recognize that specific jurisdictions may not be suited to IM/VM requirements and to

allow the relevant Covered Entities to develop alternative credit support arrangements to protect against the risk of counterparties in such jurisdictions.

5. **Scope of Coverage:**

    a. **Exclude Deliverable FX**: Deliverable foreign exchange ("**FX**") OTC derivatives and forwards should not be subject to mandatory IM requirements. Such OTC derivatives and forwards are highly liquid and the relevant risks are already subject to risk mitigation through "continuous linked settlement", the exchange of VM through the use of credit support arrangements and prudential regulation.

    b. **Type of Entity**: ISDA agrees with the exclusion of non-financial end-users, sovereigns and central banks from margin requirements. In addition, structured finance special purpose vehicles ("**SPVs**") should not be subject to the margin requirements.

6. **Margin Calculation:**

    a. **Models**: If IM is required to be collected, ISDA recommends that internal models already approved by other regulators should be eligible for IM calculation purposes. In addition, ISDA recommends that netting within these models is allowed across asset classes where it is legally enforceable.

    b. **Frequency of VM Determination**: The Study recommends that VM be collected and calculated with "sufficient frequency". ISDA supports this, and given the importance of VM exchange to systemic resiliency, proposes that BCBS and IOSCO allow "sufficient frequency" to be determined by a Covered Entity, based on the type and liquidity of the collateral.

7. **Collateral**: ISDA believes that eligible collateral, as well as appropriate haircuts for the collateral used, should be determined by the parties involved. Further, where collateral is posted in a different currency to the exposure, no haircut should apply where the parties have in place an ISDA Standard Credit Support Annex ("**SCSA**").[3]

8. **Treatment of Margin – Segregation and Re-hypothecation**: Segregation and third party custody should not be required by regulation and re-hypothecation should not be prohibited by regulation, although we recognize that if two parties are collecting IM from each other, it may be necessary to impose certain segregation or customer protection arrangements. A party collecting IM should offer segregation as an option so the parties can agree on segregation if commercially appropriate. VM should not be required to be segregated and re-hypothecation of VM should be permitted.

9. **Inter-affiliate OTC derivatives**: ISDA does not support the requirement to collect IM on derivative transactions between affiliated entities.

10. **Cross-Border OTC derivatives**: ISDA applauds the BCBS/IOSCO's efforts for consistency between the margin regulations of different jurisdictions. The

[3] The SCSA is a next generation credit support document which is currently being introduced to the industry. See further discussion in Appendix 4.

implementation and timing of margin rules should be coordinated and consistent across jurisdictions. For cross-border OTC derivatives, we recommend that the regulations of the host country govern margin requirements.

C. Key Concerns with the Proposal

ISDA agrees with the Study's main objectives: (i) creating systemic resiliency; (ii) promotion of central clearing; and (iii) the preservation of market and collateral liquidity. We applaud BCBS and IOSCO in their efforts to determine ways to achieve these challenging goals. However, the current margin proposals raise a number of key issues which effectively undermine the stated objectives. We discuss the concerns below.

1) IM is not an effective means to achieve the Study's objectives.

a) Pro-cyclical effects – In order to hedge counterparty risk, IM should be risk-sensitive. That is, in order to protect value within a 99% confidence interval over a holding period of ten days, IM calculations should be dynamic and responsive to changes in market and counterparty conditions. However, this raises a concomitant issue of pro-cyclicality. In times of market stress, volatility (a key factor in IM model calculations) rises and margin requirements will likely increase as a result. In its study on collateral requirements, the Bank for International Settlements ("**BIS**") calculated that, for OTC interest rate swap portfolios of the fourteen major derivatives dealers, IM requirements under high market volatility would be about three times the IM requirements in low market volatility.[4] This would have significant pro-cyclical effects as demand for collateral would rise, putting further pressure on liquidity and the financial markets during periods of significant stress. This is clearly inconsistent with the objective of systemic resiliency.

b) More effective alternatives – ISDA believes that the Basel III framework is a more appropriate tool for achieving systemic resiliency. The Basel III framework calls for capital requirements on exposures specifically arising from OTC derivatives activity. This capital is there to absorb losses. Prudentially regulated entities are required to hold appropriate regulatory capital in respect of credit exposures created by OTC derivatives. Under the Basel III proposals this will rise significantly, especially credit valuation adjustment ("**CVA**") capital charges, which are likely to add considerably to the capital requirements. CVA charges are extremely sensitive to counterparty quality and risk mitigants and therefore cover the risk of rating migration up to default very well. Regulatory capital is calculated on a portfolio basis and reflects the realised risks of default, together with the fact the probability of both parties to a bilateral contract defaulting simultaneously is extremely remote. This use of capital is therefore efficient and has proved to be an effective risk mitigant. By contrast, posting of two-way IM is extremely inefficient as it assumes that both parties to every contract must be protected against each other's default simultaneously. As such, it does not represent an effective use of scarce capital and ignores the portfolio effects of counterparty credit risk.

The collection of VM promotes systemic resiliency by reducing accumulated unrealized losses in OTC derivatives positions. It is an effective mechanism that reduces the exposure to product specific risk. In contrast to the collection of IM, the collection of

[4] See BIS Working Papers No 373, Collateral requirements for mandatory central clearing of over-the-counter derivatives, March 2012, p. 20.; available at http://www.bis.org/publ/work373.pdf

VM complements capital retention in the effort to reduce risk and increase systemic resiliency.

c) Excessive drain on liquidity - The application of the proposed measures comes at a very high price in terms of their impact on market and collateral liquidity. Despite the envisioned use of thresholds (aimed to alleviate such demands on collateral, but of limited impact for financial counterparties)[5], the proposed measures are likely to lead to substantial increases in additional collateral, leading to major disruptions in the market for collateral, exerting enormous pressure on market liquidity with the potential for significant economic dislocation. ISDA estimates that the combined effects of the proposed rules are likely to lead to a significant liquidity drain on the market, estimated to be in the region of US$15.7 trillion to US$29.9 trillion (see Appendices 1 and 2 for calculations). The estimates are highest ($29.9 trillion) if the industry is unable to utilize existing internal models for market and counterparty credit risk, and has to rely on the look-up tables. Simply put and however measured, it may not be possible for the market to deliver the incremental collateral implied by the proposals as they are currently formulated.

There are four particular aspects of the proposals that are likely to place significant strain on the system, create demands on market and collateral liquidity, and impose significant operational risks on large number of participants. These are:

- the requirement that **each** Covered Entity post the full amount of IM on a **gross** basis,
- the requirement for mandatory full IM segregation **without** the possibility of re-hypothecation or re-use of the posted collateral,
- limitations on the use of netting for purposes of the IM calculation, and
- limitations on the eligible collateral.

The enormity of the proposed margin requirements is revealed by a simple comparison. A large clearing house holds a portfolio of approximately US$283 trillion[6]. Against it, the clearing house holds US$95 billion[7] of cash and collateral, of which US$59 billion[8] is IM. This represents a 0.021% of the cleared notional amount. In a similar context, a portfolio of US$253 trillion of non-cleared (and non-exempted) OTC derivative transactions would require approximately US$15 trillion IM under the current BCBS/IOSCO proposals. In this case IM would represent 5.9% of the non-cleared notional amount. In other words, the IM requirement under the current BCBS/IOSCO proposals would be roughly 280 times larger than the one applied by a large clearing house. It should be noted that the CCPs' IM methodologies have been approved by the regulators and have been tested during the 2008 crisis. When Lehman brothers defaulted, only 2/3rds of the CCPs' IM was required to compensate for related losses.

[5] QIS results from individual firms support this comment.
[6] LCH.Clearnet Annual report & accounts 2011, p. 5 (www.lchclearnet.com/Images/LCH.Clearnet%20Annual%20Report%20and%20Accounts%202011_tcm6-60478.pdf)
[7] LCH.Clearnet Annual report & accounts 2011, p. 2: average cash and collateral under management is €73.1 billion
[8] LCH.Clearnet Annual report & accounts 2011, p. 45: €4.3 billion assets IM and €40.1 billion liabilities IM

2) Damage to OTC derivative markets and hindrance to hedging.

ISDA believes that the application of the proposals as they are currently formulated is likely to cause irreparable damage to the OTC derivatives business because of the dramatic increase in the cost of providing such products. ISDA estimates that the cost of "borrowing" the required collateral by the dealers in order to comply with the proposals is likely to lead to a 20-fold increase in the cost of providing a plain vanilla interest rate OTC derivative (from a current 0.25 basis points bid - ask spread, to 5 basis points – (see Appendix 4 for supporting calculations).

The increased cost of providing and acquiring OTC derivatives will have a chilling effect on the availability and use of OTC derivatives to hedge risk. OTC derivative instruments are widely used by many economic agents to hedge a broad spectrum of risks. This activity promotes economic growth through a better allocation of risk and resources throughout the economy, effectively reducing overall systemic risk, by enabling participants to hedge (and thus reduce) a vast array of economic risks. It should be noted that while these proposals are motivated by a desire to establish systemic resiliency by reducing counterparty risk, their application is likely to increase economic risk (and thus compromise systemic resiliency) by discouraging (or even eliminating) the ability of market participants to hedge such risks. Thus, a negative by-product of the current proposals may be an increase in unhedged economic risks. In addition, higher costs of providing derivatives may lead to an uneven playing field as some market participants become less able to economically compete in the derivatives markets. ISDA urges BCBS/IOSCO to consider the impact and the potential cost that these proposals are likely to impose on the system, in exchange for ill-defined benefits – in terms of counterparty risk reduction - as demonstrated by historical losses in the OTC derivatives market. Since 2007, losses on OTC derivatives positions in the US banking system due to counterparty defaults have totaled less than $2.7 billion, a period that includes failures of over 350 banks with assets of more than $600 billion[9]. ISDA believes that BCBS/IOSCO, in formulating its proposed margin requirements for non-cleared derivatives, must take into account this experience and margin levels should be set at levels consistent with historical losses experienced.

3) Potential damage to the real economy.

The imposition of universal two-way IM as proposed (coupled with additional demands that such collateral remains segregated and not be re-hypothecated) will inevitably lead to a very high percentage of the collateral pool currently available in the market having to be pledged as IM. Such a development is likely to lead to an extensive liquidity and collateral shock with unintended consequences for the global economy. The high grade collateral pool that is available to global market participants comprises a fundamental part of the provision of overall funding and liquidity to a large number of market participants. Reducing the size of this collateral pool would be tantamount to reducing the monetary base available to the economy, impacting directly the ability of financial institutions to fund themselves and thus their ability to make loans and perform other important activities in the real economy. Reductions in the level of re-hypothecation of collateral could further reduce the availability of liquidity in the system. The combined effect would be analogous to a "quantitative tightening" but one of gargantuan proportions. The effects of such a massive contraction in liquidity could have a substantial negative impact on the global economy.

[9] ISDA's Counterparty Credit Risk Management in the US Over-the-Counter (OTC) Derivatives Markets Paper, August 2011

ISDA believes that the application of the proposals as they are currently formulated is likely to cause irreparable damage to the OTC derivatives business because of the dramatic increase in the cost of providing such products. The additional funding and balance sheet costs that large financial institutions, such as banks, will incur if they are required to post IM to their counterparties will inevitably be reflected in the pricing of derivatives contracts. ISDA estimates that a 10-year interest rate swap that currently prices at a spread of 0.25 basis points on a fully variation margined basis would increase to around a 5 basis point spread to reflect the funding cost of proposed IM. [10] ISDA has made other similar estimates to illustrate the impact of IM funding costs: for example a 30-year interest rate swap that currently prices at 0.25 basis point spread would rise to 6.46 basis points; and a 5-year interest rate swap would rise from 0.25 basis point spread to 2.86 basis points. Details of all of these examples are provided in Appendix 4 and, we must stress, are subject to the same disclosure about assumptions that we provided in the preceding paragraph.

4) Risk transfer.

Under the proposed framework, each Covered Entity must fund itself before executing an OTC derivative. The Covered Entity has to borrow the IM which is to be posted to the counterparty on the funding market. This means that every Covered Entity is likely to convert/transfer some exposure from counterparty risk to credit risk. We do not believe that this kind of risk transfer, instead of a genuine "de-risking", should be required in order to reduce the systemic risk. Counterparty risk is often a potential risk, likely to materialize only in the closeout process (when the Covered Entity has to simultaneously manage the counterparty's default and the increased positive exposure provided by the derivative mark-to-market); whereas the credit risk implies a "full risk" represented by instantaneous and effective exposure to the funding market.

5) Disincentives to manage counterparty risk.

As previously mentioned, the main effect of the margin proposals is the reduction of counterparty risk by the conversion or transfer of this risk to other areas (concentration, liquidity, credit, reduced hedging of market risk). ISDA notes that counterparty risk is a subject of continuous management by the banking industry which has developed a number of techniques/tools to manage it on an on-going basis. Such techniques include, but are not limited to:

a. Investment in internal models and control processes;
b. Development of collateral management tools and processes;
c. Mitigation of credit risk through provisions in contractual agreements;

[10] There are several reasonable assumptions that underlie this illustration, which are fully described in Appendix 4, but we would note in particular that this increase in cost relates to a single trade in isolation. In any portfolio with offsetting positions one would expect pricing differences may be less material. While we can conclude that the imposition of IM will increase costs. The increase will depend on (i) the idiosyncratic netting effects on the portfolio of each particular client of a dealer, and (ii) the market place (because if every dealer charged based on their cost of funding then only the one with the lowest cost of funds would trade as all others would be uncompetitive). Interestingly, a trade that is IM reducing might actually trade through the mid-market level. Nevertheless, the imposition of IM will represent a cost increase and this cost increase, no matter its degree, will be factored into swap pricing and affect all participants, irrespectively of being covered entities or not..

d. The active management of counterparty risk through their CVA desks according to the upcoming Basel III framework.

These processes are driven by the incentive of potential savings in terms of capital requirements that justifies their costs. The proposed framework virtually eliminates counterparty risk arising from OTC derivatives and makes the use of such tools redundant. Within a framework which requires the mandatory elimination of counterparty risk through IM posting, these developments will be reduced or cease. This development contrasts with the aims of Basel III regulation and represents a potential source of systemic risk because it created disincentives to manage the residual counterparty risk. In addition, this proposal could make Basel III counterparty rules effectively obsolete or even not applicable

6) Collateral Transformation.

The imposition of high quality margin requirements in the bilateral world will spawn a huge growth in collateral transformation. In May 2012 FSA published a paper which warned of the dangers of this practice which effectively shifts liquidity risk from the well capitalized, well regulated banking sector to the undercapitalized and largely unregulated offshore insurance and reinsurance sectors.[11]

D. ISDA Recommendations

1) Universal two-way IM should not be required.

As discussed above, the imposition of universal two-way IM is not an effective tool to accomplish the stated goals of the G20 leaders and BCBS/IOSCO. The proposed IM requirements would dramatically reduce counterparty risk, but at an excessive cost to market liquidity and stability. The proposed IM requirements are estimated to drain market liquidity by $15 trillion to $16 trillion in collateral. Further, IM is inherently pro-cyclical as the calculation of IM is related to volatility. BIS estimated that the amount of IM required in a low volatility market would triple in times of a stressed market. There are alternative tools that would be more effective in (i) creating systemic resiliency; (ii) promotion of central clearing; and (iii) the preservation of market and collateral liquidity. The combination of capital requirements and VM requirements would be sufficient and more suitable in achieving these goals. Counterparty risk is better addressed via capital requirements and VM is an effective tool to reduce product specific risk. It is unnecessary and potentially counterproductive to additionally require universal two-way IM.

2) Covered Entities should be required to post VM to each other with no thresholds.

ISDA supports the exchange of VM with zero thresholds among Covered Entities. The exchange of VM is an effective method of risk reduction and, thereby, increases resiliency in the financial markets. Exchange of VM will protect the system from undetected build-up of unrealized risk (as occurred with AIG) during periods of market stress. VM exchange alone with no thresholds should address systemic resilience concerns.

[11] http://www.fsa.gov.uk/pubs/discussion/dp11_newsletter.pdf

3) If IM is required, we request that BCBS/IOSCO determine and measure ways to alleviate the impact on the financial markets.

a. Include provisions that will reduce the amount of collateral withdrawn from the markets.

If BCBS/IOSCO continue to consider including IM in the margin requirements, we respectfully urge BCBS/IOSCO to actively seek and include specifications that will lessen the negative effects as described above. For example, instead of imposing IM on all financial firms and systemically important non-financial entities, narrow the scope of entities. Some ISDA members have suggested limiting the scope for IM exchange to derivative market intermediaries ("**DMIs**") and systemically important financial institutions ("**SIFIs**") and allowing thresholds, while another segment of ISDA's membership feels strongly that no IM requirements should be imposed at all. [12]

b. Conduct a thorough and detailed impact study of margin requirements, share the results with the industry for review and comment.

ISDA strongly encourages BCBS/IOSCO to carry out a thorough analysis of the potential impact of margin requirements under consideration before implementation. As discussed above, a preliminary estimate of collateral needs related solely to the current proposed initial margin requirements was determined to be in the area of US $15-16 trillion. ISDA is highly concerned about the harmful impact that removal of such an amount of collateral will have on the global markets, particularly in the current economic environment. The overarching objective of the G20 in reforming the OTC derivatives markets is to build "a more resilient financial system".[13] Depleting the cash markets of trillions of dollars in the highest quality securities and hampering the derivatives markets through increased costs and illiquidity will instead destabilize the financial system. The imposition of the proposed margin requirements is aimed at eliminating counterparty risk, but at the cost of market liquidity. The proposal potentially increases systemic risk and impairs systemic resilience because of the drain on liquidity and increased cost of hedging. Therefore we respectfully request that BCBS/IOSCO conduct thorough studies of their margin proposals and make the results available to the industry for review and comment.

c. A Covered Entity should be allowed to set its own thresholds for IM, subject to a cap on the aggregate amount of thresholds set by a Covered Entity. The cap should be tied to Tier 1 capital.

In the event that requirements for IM are introduced ISDA agrees with the proposal to permit thresholds for IM and recommends that thresholds be determined by Covered Entities that are party to the OTC derivative. Covered Entities are in the best position to assess the risk of their counterparties and have models that may be used to determine appropriate thresholds for specific counterparties, subject to regulatory review. Covered

[12] G20, Cannes summit final declaration; available at (www.g20.org/images/stories/docs/eng/cannes.pdf).

[13] With reference to prudentially supervised institutions, the sentiment about not posting IM was quite strong and it would be tantamount to posting collateral twice – one in the form of capital requirements and another in the form of imposing IM.

Entities use sophisticated models and methods to regularly determine appropriate loan and other exposure to borrowers and other counterparties and can apply the same tools to determine thresholds. Establishment of a cap on thresholds, as a function of Tier 1 capital, would act as a risk mitigant. It is however important to note that the use of thresholds, even of large magnitude, does not seem to significantly mitigate IM for Category A, Band C firms (financial firms, as defined in the Study). However it does impact IM for Category D firms (non-financial firms).[14]

4) Segregation should only be required for IM and re-hypothecation should only be prohibited for IM if both parties are posting to each other.

To the extent that IM is required, segregation of IM should not be required unless the two counterparties to an OTC derivative transaction are posting collateral to each other. A requirement that IM be segregated would only exacerbate the detrimental effects of liquidity drain discussed above. If both parties are posting IM, we agree that re-hypothecation should not be permitted, unless agreed upon otherwise by the parties involved. The parties should also be allowed to agree on the re-investment of cash collateral. Segregation should be offered for IM, but not required, and the terms for collateral segregation should be determined by agreement of the parties.

With regard to VM, segregation should not be required and re-hypothecation should be allowed.

5) Netting and portfolio margining should be permitted if legally enforceable.

The margin rules should provide broad ability for netting and portfolio margining. Netting and portfolio margining are essential tools currently used for risk management. We ask that BCBS/IOSCO allow netting and portfolio margining that is legally enforceable, including between cleared and non-cleared OTC derivatives.

6) Parties should be able to determine eligible collateral and appropriate haircuts, subject to subsequent regulatory review.

We agree with the Study's general principle regarding eligible collateral, that it should "have good liquidity…[and] not be exposed to excessive credit, market and FX risk."[15] The Study also notes that asset liquidity can change rapidly.[16] Hence, we ask that Covered Entities be responsible for determining eligible collateral and applicable haircuts for specific transactions and counterparties. Covered Entities are active participants in the relevant markets and are well equipped to react dynamically to changes in levels of liquidity and price to efficiently determine appropriate collateral and haircuts.

The combination of these recommendations goes a long way to ensure the system's resiliency without the negative effects on market and collateral liquidity associated with the BCBS/IOSCO proposal.

* * *

[14] QIS results from individual firms support this comment.
[15] Study, p. 22.
[16] Study, p. 22.

ISDA appreciates the opportunity to comment on the BCBS/IOSCO study on margin requirements for non-centrally-cleared derivatives. We trust this submission is helpful to you. Please feel free to contact me or ISDA's staff at your convenience.

Sincerely,

George Handjinicolaou, Ph.D
Deputy CEO and Head of ISDA Europe, Middle East and Africa

B. Responses to Discussion Paper Questions

Q1.

A. What is an appropriate phase-in period for the implementation of margining requirements on non-centrally-cleared derivatives?

B. Can the implementation timeline be set independently from other related regulatory initiatives (e.g. central clearing mandates) or should they be coordinated?

C. If coordination is desirable, how should this be achieved?

A. ***What is an appropriate phase-in period for the implementation of margining requirements on non-centrally-cleared derivatives?*** Before implementation of margin requirements for non-cleared OTC derivatives, ISDA strongly recommends that BCBS/IOSCO make a thorough study and assessment of the impact of its proposal. Preliminary analysis of the potential impact of just the imposition of the IM requirements estimates collateral needs on the order of $15 – 16 trillion (see Appendices 1 & 2). Further analysis and quantification of the impact, positive and negative, should be performed before such rules are imposed.

The proposals come at the time when many other regulatory initiatives are under way, be they of prudential nature in the form of increased capital requirements for OTC derivative activities, or clearing initiatives. All of these initiatives imply a substantial deviation from current practice in the OTC derivatives space, and have implications for the way business is being conducted. As such, caution and patience is urged.

Market participants require significant time to assess the implications of all of the proposals together, evaluate and assess new risks that may be created in the process, as well as build the proper legal and operational infrastructure that is required for these measures to be implemented. The time necessary to negotiate documentation and make arrangements for the segregation of collateral alone should not be underestimated.

In deciding the appropriate phase-in period of implementation, BCBS/IOSCO should be mindful of the following factors that impact such a determination:

- The time required by the regulators to approve internal models used for margin calculations. In this regard, ISDA strongly recommends that existing models should be grandfathered until approved, or internal models approved by other regulators should be eligible for IM calculation purposes.

- The time required for the covered entities to build the necessary infrastructure for implementing the proposals to post IM and exchange VM. Although banks and dealers may have the infrastructure in place, they still need to scale it for the expected significant increase in activity; they need time to renegotiate and execute amendments to ISDA Schedules and Credit Support Annexes ("**CSAs**"), as well as to incorporate the changes resulting from the bilateral posting requirement. This would also require a significant amount of time. More importantly, non-dealer covered entities are likely to require even longer time periods to prepare operationally for the new requirements.

- The lack of clarity regarding the liquidity impact of the proposals. This is compounded by the fact that other regulatory initiatives (Basel initiatives, clearing) are likely to impact liquidity as well. As a result, there is great uncertainty as to the combined effect of these regulatory initiatives on market and collateral liquidity.

- The need to clarify and perhaps introduce new legislation with respect to solvency regimes in several jurisdictions. ISDA applauds the BCBS/IOSCO objective to avoid regulatory arbitrage by pursuing a global approach to the topic of margining non-cleared OTC derivatives. However, the practical roll-out and implementation of the proposals in the various jurisdictions is likely to be impeded by differences in the solvency regimes among jurisdictions. These differences are likely to manifest themselves in difficulty in enforcing segregation (and thus security of posted collateral).

As a result, ISDA strongly recommends a long phase-in approach in order to provide both market participants adequate time to prepare, and the Supervisors enough time to properly gauge the impact of the rules and eliminate the potential problems from a premature application of such proposals. In addition, ISDA would recommend that the phase-in period commence after the clearing mandate is implemented.

B. ***Can the implementation timeline be set independently from other related regulatory initiatives (e.g. central clearing mandates) or should they be coordinated?*** ISDA believes that coordination with the clearing mandate is important because of its potential interactions with these proposals. As noted above, the clearing mandates, as well as other capital initiatives, are likely to impact market and collateral liquidity. Enough time should be allowed for such interactions to be fully understood and evaluated. It needs to be stressed that the nature of bilateral margin –as opposed to CCP clearing – brings out new issues and challenges that need proper attention before they are implemented.

C. ***If coordination is desirable, how should this be achieved?*** ISDA strongly recommends that the margin of non-cleared trades for any class of derivatives should follow the application and the implementation of the clearing mandate for such class. By doing so, it will provide the market place the time to fully absorb the operational challenges, as well as other unresolved issues involving clearing, before it opens new fronts associated with the imposition of margin for non-cleared trades. A similar sequencing should be applied with respect to capital rules. The application of such rules in the relevant jurisdictions should be finalized prior to finalizing margin rules. Basel III has not been adopted in final form by many jurisdictions.

Further, consideration should be given for OTC derivatives which involve jurisdictions that do not have clearing organizations or legal and regulatory systems that support netting and standard collateral arrangements. For such OTC derivatives, the imposition of IM and VM requirements may result in an increase in risk to the counterparty outside those jurisdictions. We ask that BCBS/IOSCO acknowledge that the margin requirements may not be effective in reducing risk for such OTC derivatives and allow the relevant Covered Entities to utilize other available risk mitigating methods to reduce counterparty risk.

Q2.

A. Should foreign exchange swaps and forwards with a maturity of less than a specified tenor such as one month or one year be exempted from margining requirements due to their risk profile, market infrastructure, or other factors?

B. Are there any other arguments to support an exemption for foreign exchange swaps and forwards?

A. ***Should foreign exchange swaps and forwards with a maturity of less than a specified tenor such as one month or one year be exempted from margining requirements due to their risk profile, market infrastructure, or other factors?*** We believe that deliverable Foreign Exchange ("**FX**") swaps and forwards should be exempt from any mandatory exchange, collection or posting of variation margin or initial margin between transacting parties. Further, the FX market should not be bifurcated based on tenor for the purpose of applying any such mandatory margin regime. We view as persuasive and compelling the position and supporting arguments presented by the GFMA Global FX Division in their separate submission in response to the Study.

The unique characteristics and role of deliverable FX products distinguish them from other OTC derivatives. Consistent with the key principles set out in the consultative document, the risks associated with the FX market are appropriately mitigated by the current regime of encouraging prudent supervision, practice guidelines and capital requirements. The predominant risk associated with non-cleared deliverable FX swaps and forwards is settlement risk which has been dramatically reduced by the development and use of Continuous Linked Settlement ("**CLS**"), a private sector initiative. Replacement cost risk has been appropriately mitigated for these products through collateral exchanged under CSA's, with usage increasing. In addition, operational risk in FX has been mitigated through its strong operational infrastructure and has a proven track record of withstanding widespread market disruption.

B. ***Are there any other arguments to support an exemption for foreign exchange swaps and forwards?*** ISDA believes that margin requirements should not apply to FX products. Failure to provide an exemption for FX swaps and forwards, a requirement to post IM could very well increase rather than decrease potential systemic risk by dis-incentivizing participants to use facilities such as CLS, and artificially increasing the cost of hedging FX risk, an activity that is integral to global economic activity and used extensively by a wide array of participants.

Q3.

A. Are there additional specific product exemptions, or criteria for determining such exemptions, that should be considered?

B. How would such exemptions or criteria be consistent with the overall goal of limiting systemic risk and not providing incentives for regulatory arbitrage?

A. ***Are there additional specific product exemptions, or criteria for determining such exemptions, that should be considered?*** ISDA believes that the issues are broader than whether or not to exempt a specific product. The imposition of margin on non-cleared trades as proposed is likely to significantly reduce the availability of such products to end users,

and/or make them prohibitively expensive to end users, in addition to creating incremental liquidity and operational requirements for all. OTC derivative instruments are widely used by a broad range of participants within the global economy for the purpose of hedging a wide spectrum of risks.

B. ***How would such exemptions or criteria be consistent with the overall goal of limiting systemic risk and not providing incentives for regulatory arbitrage?*** ISDA believes that it is important for BCBS/IOSCO to maintain consistency in the treatment of OTC derivatives products other than the proposed exemption for FX. Supervisors should focus on mitigating the adverse results the current proposals would have on the OTC derivatives market, collateral liquidity, as well as the effects of such collateral shortage on the broader economic activity.

Q4.

A. Is the proposed key principle and proposed requirement for scope of applicability appropriate?
B. Does it appropriately balance the policy goals of reducing systemic risk, promoting central clearing, and limiting liquidity impact?
C. Are there any specific adjustments that would more appropriately balance these goals?
D. Does the proposal pose or exacerbate systemic risks?
E. Are there any logistical or operational considerations that would make the proposal problematic or unworkable?

A. ***Is the proposed key principle and proposed requirement for scope of applicability appropriate?*** ISDA agrees that the margin requirements should not apply to non-financial entities that are not systemically-important.

Sovereigns and central banks are also specifically excluded from requirements to collect or post margin. We support this view as well as the view to exempt structured finance special purpose vehicles ("**SPVs**"), as such entities are generally not financial firms. SPVs enter into swaps for risk mitigation purposes and generally are not in a position to post collateral. In addition, OTC derivatives with such entities typically have provisions that mitigate credit risk, such as: (i) the swap counterparty has a security interest over all of the SPV's assets; (ii) the swap counterparty has first priority with regard to cash flow payments; and (iii) SPVs are bankruptcy-remote vehicles.

B. ***Does it appropriately balance the policy goals of reducing systemic risk, promoting central clearing, and limiting liquidity impact?*** As we have previously stated and restate below, the proposals as currently stated fail to address the aims of establishing systemic resilience and promoting central clearing and would also have a major liquidity impact on collateral markets. The requirement for universal, two-way IM posting does reduce counterparty risk, however at disproportionate cost to the economy.

It is not clear that "de-risking" the OTC derivative market by further reducing counterparty risk is a legitimate policy aim in itself, particularly if one considers historical losses in the OTC derivatives market. Since 2007, losses on OTC derivatives positions in the U.S.

banking system due to counterparty defaults have totaled less than $2.7 billion, over a period that includes failures of over 350 banks with assets of more than $600 billion[17]. ISDA believes that BCBS/IOSCO, in formulating its proposed margin requirements for non-cleared derivatives, should take past experience into account and margin levels should be set at levels consistent with historical losses experienced.

The proposed measures are aimed at addressing risks of this magnitude, but in the process they are likely to lead to potentially massive problems in the market for collateral, and possibly for the rest of the economy.

One can estimate the order of magnitude of the potential impact of such universal application of two-way IM exchange by utilizing the proposed standardized initial margin schedule, on the assumption that no internal model or portfolio margin systems are deployed. This provides an upper bound, albeit unrealistically high. It yields an estimate of $29.9 trillion (see Appendices 1 & 2, for an illustration of this methodology). Use of more reasonable assumptions (which assume extensive use of internal models) still produces estimates in the region of $15-16 trillion (see Appendix 1 & 2). For purpose of reference and perspective:

- The global supply of collateral is approximately $74.4 trillion (please see Appendix 5 for details).
- The collateral (both IM and VM) held by dealers as of December 31, 2011 was $3.6 trillion[18].
- The size of balance sheets of the Federal Reserve and the ECB (which hold large amounts of collateral) are around $3 trillion.
- The quantitative easing (QE) exercises conducted by the large central have ranged between $0.5 and $1 trillion.
- The capital of the largest 16 banks in the global banking system is around $1 trillion.

Demands on additional collateral of such magnitude, coupled with additional demands that the collateral remain segregated and not re-hypothecated, are simply not likely to be met. Such demand would cause wide spread disruptions in the market for collateral and thereby in the general economy, as the collateral market is a major linchpin of the financing chain. Hence one might analogize this proposal to "quantitative tightening", but one of massive proportions. The effects of such a massive contraction in liquidity could have a substantially negative impact on the global economy. This demonstrates the excessive cost of arriving at systemic resiliency via the proposed measures.

It is far from clear that the aim of central clearing will be achieved if counterparty credit risk is virtually eliminated for non-cleared trades. However, capital charges related to non-cleared derivatives will provide strong incentives to dealers and others to use central clearing. Moreover, any increase in clearing because of the proposed margin requirements would come at a great cost to market participants, by imposing very large and very punitive liquidity and collateral needs, disrupting the market place, and having potentially unintended negative consequences on the real economy.

[17] ISDA's Counterparty Credit Risk Management in the US Over-the-Counter (OTC) Derivatives Markets Paper, August 2011
[18] ISDA's 2012 Margin Survey, April 2012

Because of the above, ISDA believes that the current proposals are inconsistent with the spirit and the letter of the G-20 pronouncements. In the G-20 statements, there was reference to the need to minimize counterparty risk. The proposed key principle presents an extreme form of risk mitigation by effectively eliminating counterparty credit risk through the imposition of IM and VM. By doing so, it effectively dis-intermediates the credit extension function performed by providers of such products which are primarily major financial banking institutions; increases the cost of using such instruments for end users; and multiplies liquidity and operational requirements for all involved.

C. ***Are there any specific adjustments that would more appropriately balance these goals?*** ISDA believes that the costs of the proposals are disproportionate to the potential benefits, as well as the appropriateness of these benefits. We urge BCBS/IOSCO to conduct a detailed impact study to quantify the costs and benefits of proposed margin requirements prior to implementation. In addition, in the preceding section we have outlined proposals for modifications that would alleviate some of the stress on liquidity that would result from the current proposal.

D. ***Does the proposal pose or exacerbate systemic risks?*** The BCBS/IOSCO proposals aim at promoting systemic resiliency by reducing counterparty risk. However, such excessive reduction fails to balance the desire to reduce counterparty risk with other considerations that may in fact increase systemic risk. The imposition of universal two-way IM and VM as proposed is likely to lead to an extensive liquidity and collateral shock with unintended consequences for the global economy. The high grade collateral pool that is available to global market participants comprises a fundamental part of the provision of overall funding and liquidity to a large number of market participants. Reducing the size of this collateral pool would be tantamount to reducing the monetary base available to the economy, impacting directly the ability of financial institutions to fund themselves and thus their ability to make loans and perform other important activities in the real economy. Reductions in the level of re-hypothecation of collateral will further reduce the availability of liquidity in the system. These effects introduce systemic risk through other channels.

In addition, and as articulated in the previous section, another source of systemic risk comes from the fact that many economic risks, that otherwise would have been hedged, are likely to remain unhedged, simply because the cost of providing such hedges will become prohibitively expensive and/or such products may not be available because providers may not be willing to provide them if the cost of doing so becomes so expensive.

Either through the effect on the general economy or because of increase in unhedged economic risks, it is likely that systemic risk benefits emanating from minimizing counterparty risk could potentially be fully offset by other risks, unwittingly, introduced by the proposals.

E. ***Are there any logistical or operational considerations that would make the proposal problematic or unworkable?*** As discussed above, there are four major factors that make the current BCBS/IOSCO proposal unworkable. These are: the universal, two-way IM posting, the inability to re-hypothecate, restrictions on the use of netting and the limitations on eligible collateral. Each of these factors, and all four in combination, contribute heavily to

the undesirable effects they create on collateral demand. In addition to the above, the proposal is likely to lead to an explosion in the cash management, credit management, accounting and other operational requirements for a large number of market participants, be they the dealers themselves (as they may need to increase scale), or users of these instruments who, for the first time, may have to put in place these functions.

Q5.

A. Are initial margin thresholds an appropriate tool for managing the liquidity impact of the proposed requirements?
B. What level of initial margin threshold(s) would be effective in managing liquidity costs while, at the same time, not resulting in an unacceptable level of systemic risk or inconsistency with central clearing mandates?
C. Is the use of thresholds inconsistent with the underlying goals of the margin requirements?
D. Would the use of thresholds result in a significant amount of regulatory arbitrage or avoidance?
E. If so, are there steps that can be taken to prevent or limit this possibility?

A. ***Are initial margin thresholds an appropriate tool for managing the liquidity impact of the proposed requirements?*** ISDA fully supports the use of thresholds and in particular if universal mandatory two-way exchange of IM is imposed. The use of thresholds is an appropriate tool for mitigating the adverse liquidity impact of the proposed requirements, provided that threshold levels are set high enough. We recommend that market participants be allowed to set appropriate thresholds for collecting IM as of function of counterparty type and credit quality, trade and asset type, available capital, liquidity and risk appetite. We do, however, flag the possibility that use of thresholds as a tool for mitigating the adverse effects of the proposals on liquidity may have limitations. To a large extent, the mitigating benefits of thresholds are a function of the characteristics of the OTC derivative portfolios. Thresholds, even of large magnitude, do not seem to significantly mitigate IM for Category A, B and C firms (financial firms, as defined in the Study). However they do impact IM for Category D firms (non-financial firms).[19] As such, ISDA urges BCBS/IOSCO to carefully review the results of the QIS under way. The QIS is based on actual portfolios and could provide significant insights as to effectiveness of thresholds as mitigants.

As much as the imposition of IM and VM on non-cleared swaps is meant to replicate practices prevailing in the cleared world, there are fundamental differences between Central Clearing Counterparties ("**CCPs**") and parties involved in a bilateral relationship. CCPs must collect IM because they have limited risk mitigants available to them. To that effect, CCPs combine different blends of IM, VM, thresholds and default funds available, as they are operated principally to minimize counterparty risk. In the bilateral world, contracting parties, including banks, have their own capital and other mitigants available which create a completely different credit context, enabling the proper use of thresholds. The contracting parties are in the best position to determine appropriate thresholds, based on their perceptions of counterparty quality and their risk appetite.

[19] QIS results from individual firms support this comment.

In addition, the CCP must guarantee a contract's performance even if one of the counterparties defaults. This guarantee requires the CCP to perform a close-out process with the defaulting party and replace the defaulting party's contract with a new one. The new contract's cost should theoretically equal the VM already collected. If the close-out occurs over a longer time period, however, any adverse movement in the replacement contract's cost can be covered by IM. In contrast, a non-defaulting counterparty in a bilateral situation has no obligation to replace the defaulted contract with a new one, potentially leading to a reduced need for IM.

In setting IM and thresholds, another fundamental point that needs to be considered is the important function performed by netting. Many market participants have developed internal portfolio margin 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 maximizes efficiencies and minimizes costs and operational risks. There is a real risk that these procedures will suffer significant disruption if, for example, complex non-cleared positions which are hedged with vanilla cleared trades do not benefit from cross margining. Such requirements may significantly adversely affect the economics of hedging and reduce its use in the real economy.

B. ***What level of initial margin threshold(s) would be effective in managing liquidity costs while, at the same time, not resulting in an unacceptable level of systemic risk or inconsistency with central clearing mandates?*** Determining, a priori, a certain threshold level that would apply to all would be tantamount to "one size fits all" situation. The BCBS/IOSCO proposal supports allowing thresholds, contemplates different thresholds for different types of entities, and does not prescribe levels or limits. ISDA recommends that the proposal should leave the determination of threshold levels to the contracting parties and allow them to further calibrate specific threshold levels taking into account the risk assessment of their counterpart. Thresholds should be permitted for all counterparties and covered entities should be allowed to determine thresholds on a counterparty by counterparty basis. This would help ensure consistency and harmonization of margin requirements amongst different regulatory jurisdictions.

Since a threshold level is effectively an extension of credit to counterparty, arbitrary adoption of fixed threshold levels could lead to serious inconsistencies in practice. ISDA believes that there should be consistency between the treatment of OTC derivatives and other banking transactions which involve extension of credit for which normal credit assessment criteria are used. Financial institutions routinely make credit decisions in deciding the amount of unsecured risk that they are willing to extend to counterparty. Once they establish the amount they are willing to extend, they may use it in various forms, be that in the form of loans and/or other types of transactions. ISDA believes that this should include the exposure taken in the form of OTC derivatives. For example, if a bank would be willing to lend a corporate $100 in unsecured form, then it should be reasonable for the exposure derived from OTC derivatives between those parties to be included in the 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.

C. ***Is the use of thresholds inconsistent with the underlying goals of the margin requirements?*** The envisioned use of thresholds is meant to moderate the severe impact that

is likely to result from a full and strict application of a universal, two-way, gross bilateral IM exchange. In effect, the use of thresholds is undoing some of the dramatic consequences of broadly imposing IM. In this respect, ISDA does not think that the use of thresholds is inconsistent with the underlying goals of the margin requirements. However, as per previous comments, ISDA believes that both IM and threshold levels decisions should be left to the contracting parties.

D. ***Would the use of thresholds result in a significant amount of regulatory arbitrage or avoidance?*** ISDA believes that it is essential that there is consistent implementation of these proposals across all jurisdictions. Implementation of differing threshold levels in different jurisdictions would encourage regulatory arbitrage.

E. ***If so, are there steps that can be taken to prevent or limit this possibility?*** ISDA believes that the BCBS/IOSCO global approach is a step in the right direction as a uniform international level-playing field would prevent and limit regulatory arbitrage. ISDA 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. ISDA strongly urges regulators to harmonize to the maximum extent possible their implementations of the proposed margin requirements as well as the Basel III proposals.

Q6.

A. Is it appropriate for initial margin thresholds to differ across entities that are subject to the requirements?
B. If so, what specific triggers would be used to determine if a smaller or zero threshold should apply to certain parties to a non-centrally-cleared derivative?
C. Would the use of thresholds result in an unlevel playing field among market participants?
D. Should the systemic risk posed by an entity be considered a primary factor?
E. What other factors should also be considered?
F. Can an entity's systemic risk level be meaningfully measured in a transparent fashion?
G. Can systemic risk be measured or proxied by an entity's status in certain regulatory schemes, e.g. G-SIFIs, or by the level of an entity's non-centrally-cleared derivatives activities?
H. Could data on an entity's derivative activities (e.g. notional amounts outstanding) be used to effectively determine an entity's systemic risk level?

A. ***Is it appropriate for initial margin thresholds to differ across entities that are subject to the requirements?*** As discussed above, thresholds should be established as a function of commercial judgment, taking into account the counterparty's risk assessment and the specifics of the particular trade. These should be the drivers. Top down establishment of different IM threshold levels for different entities would not be appropriate and would directly interfere with participants' commercial judgments. As the consultation itself recognized, prudentially supervised institutions are perhaps the only category that would be an exemption. This group of entities carries significant and explicitly recognized capital buffers and as a result, they should be in a position to qualify for higher threshold levels.

B. ***If so, what specific triggers would be used to determine if a smaller or zero threshold should apply to certain parties to a non-centrally-cleared derivative?*** As stated above, ISDA believes that such decisions should be left to individual parties involved, taking into account elements such as creditworthiness, commercial judgment and the type of transaction. Imposing top down "one-size-fits-all" thresholds is impractical.

C. ***Would the use of thresholds result in an unlevel playing field among market participants?*** Establishing different levels of thresholds for counterparties of different credit quality does not necessarily create an un-level playing field. It simply recognizes differences in credit quality. On the contrary, mandated use of across the board thresholds would result in an un-level playing field among market participants because such an approach would not consider the creditworthiness of each individual firm, and would attempt to "equalize" all counterparties to a certain level (IM minus threshold). Viewed from a different perspective, it would be highly undesirable to create a level playing field by de-risking every counterparty through the use of universally applied posting of IM with a standardized threshold.

D. ***Should the systemic risk posed by an entity be considered a primary factor?*** ISDA believes that systemic risk, posed by entities is a key consideration that needs to be taken into account as the margin framework for non-cleared OTC derivatives is constructed.

E. ***What other factors should also be considered?*** See B and D above, but broadly speaking, ISDA believes that IM and threshold decisions should be left to the contracting parties to decide.

F. ***Can an entity's systemic risk level be meaningfully measured in a transparent fashion?*** ISDA believes that the methodologies exist to do so.

G. ***Can systemic risk be measured or proxied by an entity's status in certain regulatory schemes, e.g. G-SIFIs, or by the level of an entity's non-centrally-cleared derivatives activities?*** Prudential authorities have developed criteria for establishing whether an entity is systemically important. By doing so, they have de facto answered the question of whether systemic risk can be measured. The extent of an entity's activities in OTC derivatives, and in particular, non-centrally-cleared derivatives is clearly a factor in determining whether an entity is systemically important. In this context, ISDA's recommendation of daily exchange of VM of all covered entities is critical in directly addressing systemic concerns. The daily exchange of VM on exposures that are built during periods of extreme market volatility are considered a vital tool for protecting the system, and preventing the accumulation of large exposures (like those of AIG) that, left unsettled, can become destabilizing.

H. ***Could data on an entity's derivative activities (e.g. notional amounts outstanding) be used to effectively determine an entity's systemic risk level?*** Notional amount is a very crude measure of activity that is meant to capture turnover rather than risk. As such it is not risk sensitive and inappropriate to use for establishing systemic risk levels. There are well established (and universally accepted) risk metrics, as opposed to notional amount, that convey much more meaningful and relevant information about risk.

Q7.

A. Is it appropriate to limit the use of initial margin thresholds to entities that are prudentially regulated, i.e., those that are subject to specific regulatory capital requirements and direct supervision?

B. Are there other entities that should be considered together with prudentially-regulated entities?

C. If so, what are they and on what basis should they be considered together with prudentially-regulated entities?

A. ***Is it appropriate to limit the use of initial margin thresholds to entities that are prudentially regulated, i.e., those that are subject to specific regulatory capital requirements and direct supervision?*** Prudentially regulated entities are subject to a separate set of capital requirements and direct supervision. Therefore, any incremental margining regime should be considered within context of the applicable capital requirements. Imposition of IM (with or without thresholds) in an additive manner may compound capital requirements. Broadly speaking, the use of IM thresholds by prudentially supervised entities is justified as these institutions maintain capital for the purpose of absorbing losses. However, more work needs to be undertaken to strike the right balance between IM and capital, as these two concepts are complementary and should not be viewed in isolation. Use of threshold should be considered within that context.

B. ***Are there other entities that should be considered together with prudentially-regulated entities?*** This is a determination that the authorities need to make and needs to be considered in the context of extra-territorial scope and consistency.

C. ***If so, what are they and on what basis should they be considered together with prudentially-regulated entities?*** This is a determination that needs to be made by the authorities.

Q8.

A. How should thresholds be evaluated and specified?

B. Should thresholds be evaluated relative to the initial margin requirement of an approved internal or third party model or should they be evaluated with respect to simpler and more transparent measures, such as the proposed standardised initial margin amounts?

C. Are there other methods for evaluating thresholds that should be considered?

D. If so what are they and how would they work in practice?

A. ***How should thresholds be evaluated and specified?*** ISDA believes that the threshold should be calculated based on an evaluation of the counterparty risk of the parties involved, the specifics of the transaction involved, and commercial judgment of the firms concerned. Since these characteristics are unique to each counterparty, imposition of uniform threshold levels, irrespective of the counterparty's creditworthiness and/or the specifics of the transaction, is fraught with issues (see also our response in Q6 above).

B. ***Should thresholds be evaluated relative to the initial margin requirement of an approved internal or third party model or should they be evaluated with respect to simpler and more transparent measures, such as the proposed standardised initial margin amounts?*** The important concept that should be factored in here is netting. Blind application of IM and threshold rules on a transaction by transaction basis, ignores the fundamental concept and use of netting which serves a significant role in the market place. IMMs take netting into account; as such they should be a preferred method. Large financial institutions have developed sophisticated internal models for the purpose of setting IM and threshold levels which allow significant efficiencies and economies of scale in the determination of IM and threshold levels. Many other users, however, may not have the resources to build such models, and thus are deprived of the benefit of using such models. It is on these entities (most likely, users from the real economy) that the impact of imposing IM (with whatever threshold levels) is likely to be more severe. ISDA strongly urges the authorities to consider pre-approval and/or grandfathering of models used or developed by Covered Entities as they are essential for allowing the benefits of netting to flow through. Also, allowing the use of such models (extended by banks) by clients may be another way to alleviate the adverse impact of using standardized, risk insensitive measures that do not allow for netting.

C. ***Are there other methods for evaluating thresholds that should be considered?*** The BCBS/IOSCO proposals adequately reference the available methods. ISDA recommends that the considerations listed in responding to the previous questions are adopted.

D. ***If so what are they and how would they work in practice?*** ISDA strongly believes that, in the absence of alternative proposals, intensive use of internal models across the board will allow the benefits of netting to flow through, and thus alleviate to a large extent the negative effects market and collateral liquidity.

Q9.

A. What are the potential practical effects of requiring universal two-way margin on the capital and liquidity position, or the financial health generally, of market participants, such as key market participants, prudentially-regulated entities and non-prudentially regulated entities?

B. How would universal two-way margining alter current market practices and conventions with respect to collateralizing credit exposures arising from OTC derivatives?

C. Are there practical or operational issues with respect to universal two-way margining?

A. ***What are the potential practical effects of requiring universal two-way margin on the capital and liquidity position, or the financial health generally, of market participants, such as key market participants, prudentially-regulated entities and non-prudentially regulated entities?*** The universal application of two-way IM as envisioned by the BCBS/IOSCO current proposals could have profound implications on the OTC derivatives market, market participants using these products and also on the markets for collateral, and through them, on the general economy. These effects could be significant even if thresholds are utilized, depending on where threshold levels are set.

As stated in responding to Q4, universal application of two-way exchange of IM would require quantities of collateral that simply may not be readily available, or available at a high price. As a result, many market participants will likely to find themselves unable to source the liquid marketable collateral that would be required to support their existing bilateral margining practices today. Or if they do, collateral may come at such a high price to make the use of the OTC derivative products uneconomical by the users and/or the providers of such products.

These effects are driven by a combination of four factors; the universal requirement of two-way IM exchange; the lack of ability to re-hypothecate collateral; the limited use of collateral; and the limited range of eligible collateral. The combined effect of these factors is expected to create significant demand for incremental collateral. In our response to question 4, we outline various calculations. The range of estimates is quite large as it depends crucially on a number of assumptions. But all reasonable estimates – which we believe will be confirmed by the results of the Quantitative Impact Study ("**QIS**") that is under way by BCBS/IOSCO – lead to large amounts of incremental collateral.

The requirement that collateral is not re-hypothecated could also have profound effects on the liquidity of the collateral market, and its potential effects to the general economy. The amount of liquidity that could eventually be drained could be very significant. Some initial calculations performed by ISDA staff estimate that the proposals could potentially result in creating additional collateral needs of $15 to $16 trillion U.S. dollars (see Appendices 1 and 2 for calculations). It is unclear if such amounts of collateral are available. But even if collateral is available, the fact that an additional requirement for such collateral to be segregated and not re-hypothecated could potentially drain the economy by a huge amount of valuable assets that are routinely involved in the financing of the real economy. A further cost that is likely to be added relates to arranging protection against third party custodians, the use of which is likely to increase substantially, creating a new source of counterparty risk.

Such incremental collateral demands could be particularly harmful to the providers of these products. ISDA has calculated that the incremental cost of borrowing the additional collateral envisioned by these proposals may lead to a 20-fold increase in the cost of a plain vanilla interest rate swap (from a current 0.25 basis points bid - ask spread, to about 5 basis points). So the availability of the OTC derivatives products is likely to come into question (as some of these providers may decide that it is too expensive to offer them). Also, demand for these products is likely to wane as the cost of using these instruments goes up.

In addition to the above, there are cash management, credit accounting and other operational requirements that these proposals imply for a large number of participants who were not previously subject to such requirements and will need to develop infrastructure in order to be in compliance.

B. ***How would universal two-way margining alter current market practices and conventions with respect to collateralizing credit exposures arising from OTC derivatives?*** ISDA believes that it is likely that the cost of engaging in OTC derivatives could become prohibitively expensive with implications along the lines developed in answers of Q4 and above.

C. ***Are there practical or operational issues with respect to universal two-way margining?*** Collateral requirements on this scale would fundamentally alter the costs of collateral and the economics of transactions. Most OTC derivative market participants are not set up to collect IM and/or keep it segregated. Outsourcing these functions to a third party would imply additional costs and additional exposures. Developing capabilities for universal two-way IM would impose huge costs on a large number of participants, not all of which are able to absorb them. Among unregulated, non-bank financial institutions the burden will be significant and may well outweigh the benefit they gain from reducing their exposure to the banks they trade with, which are prudentially regulated. Even under the alternative proposals ISDA cannot see how the incremental operational issues will be avoided.

Q10.

A. What are the potential practical effects of requiring regulated entities (such as securities firms or banks) to post initial margin to unregulated counterparties in a non-centrally-cleared derivative transaction?

B. Does this specific requirement reduce, create, or exacerbate systemic risks?

C. Are there any logistical or operational considerations that would make the proposal problematic or unworkable?

A. ***What are the potential practical effects of requiring regulated entities (such as securities firms or banks) to post initial margin to unregulated counterparties in a non-centrally-cleared derivative transaction?*** ISDA believes that requiring regulated entities (such as securities firms or banks) – particularly systemically important ones - to post IM to unregulated counterparties would be extremely undesirable and counter to the stated aim of systemic resilience. These entities are subject to minimum capital requirements. Requiring them to post IM as well is tantamount to providing protection for certain risks twice. From a practical point of view it may simply not be possible to do so. Faced with such demands, dealers, among the Covered Entities, would simply not be in a position to source this collateral, or if they did, it would make their business models uneconomical. The pressure on liquidity would be such that its cost would increase dramatically. Such pressures could become particularly acute during periods of market stress when liquidity becomes even scarcer. As a result, efforts to reduce systemic risk by mitigating counterparty risk, could lead to significant increase in liquidity risk bringing systemic risk back through another channel.

B. ***Does this specific requirement reduce, create, or exacerbate systemic risks?*** As explained above, imposing the requirement to post IM on regulated entities which are subject to prudential requirements achieves marginal, if any, reductions in systemic risk, with potentially devastating results through the liquidity channel. Additionally, the insensitivity of the approach to netting and an indiscriminate imposition of IM, could lead to perverse results, as even on “risk-reducing" transactions it will inevitably drive up the capital cost and dis-incentivize non-financial counterparties from undertaking such transactions. So while "systemic" risk may reduce, "commercial" risk may rise instead. ISDA urges BCBS/IOSCO to clarify their position and exercise caution in imposing such measures which may have unintended and far-reaching consequences particularly affecting the economics of hedging.

C. ***Are there any logistical or operational considerations that would make the proposal problematic or unworkable?*** See response above.

Q11. Are the proposed exemptions from the margin requirements for non-financial entities that are not systemically important, sovereigns, and/or central banks appropriate?

Currently, many small and mid-sized companies that are only occasional users of derivatives choose to use OTC derivatives because the costs and demands of managing margin requirements on a daily basis are minimal or nonexistent. Preserving this status is appropriate. Without such exemption, some companies would be forced to use unused credit extension capacity (i.e., bank letters of credit) to post margin with their counterparties thereby incurring costs while still leaving banks effectively exposed to counterparty credit risk. If this was the outcome, the costs to end users would be significantly raised without achieving the objective of reducing the exposure of banks to counterparty credit risk.

Even so, if the BCBS/IOSCO proposals go ahead as they stand, they are likely to affect even these entities. Such entities are likely to be affected indirectly as significantly increased costs associated with using derivatives would hamper their ability to manage their risks.

Q12.

A. Are there any specific exemptions that would not compromise the goal of reducing systemic risk and promoting central clearing that should be considered?

B. If so, what would be the specific exemptions and why should they be considered?

A. ***Are there any specific exemptions that would not compromise the goal of reducing systemic risk and promoting central clearing that should be considered?*** Yes, see response in part B, below.

B. ***If so, what would be the specific exemptions and why should they be considered***? The margin requirements should exempt derivatives entered into by SPVs or equivalent structured finance vehicles used in securitizations. Many of these vehicles will not meet the definition of a financial counterparty 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 enter into OTC derivatives as part of their commercial activity and typically in a risk-reducing way. These vehicles would not be able to execute their normal business (debt issuance) without such hedges being put in place. In ISDA's view, such vehicles should be able to avail themselves of the hedging exemption for non-financial 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 securitization and structured debt markets. 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 bilateral collateralization of entities such as SPVs as well as financial counterparty-like entities such as treasury centers.

Finally, ISDA proposes that inter-affiliate transactions be exempted from the requirement to post margin in accordance with the EMIR[20] exemption in Europe where suitable risk management arrangements exist. This exemption (from clearing and/or bilateral margining) is vital to market participants.

Q13.
A. Are the proposed methodologies for calculating initial margin appropriate and practicable?
B. With respect to internal models in particular, are the proposed parameters and prerequisite conditions appropriate?
C. If not, what approach to the calculation of baseline initial margin would be preferable and practicable, and why?

A. ***Are the proposed methodologies for calculating initial margin appropriate and practicable*****?** ISDA believes that the proposed methodologies for calculating IM are unwieldy and impractical. On the one hand the use of the standardized margin schedule is prohibitive and in practice not doable because it cannot accommodate netting which literally mushrooms potential IM requirements. On the other hand the use of internal models creates the potential for disputes to increase dramatically. Market participants are likely to utilize internal models as this approach allows for the recognition of netting. However, these models need to be approved – a time consuming process – and are unlikely to lead to the same results, creating the potential for IM and VM disputes between institutions.

ISDA strongly recommends that existing internal models that have been approved by a regulator in a different jurisdiction, be grandfathered. This would be a practical way to avoid significant delays in the approval of such models and thus avoid the undesirable effects on collateral demand that reliance on the standardized margin schedule look-up tables would have.

A further practical step would be to either allow banks to extend the use of their models to their clients, or pre-approve, as a matter of priority, portfolio margining solutions that may become commercially available. Such commercially available solutions could also prove instrumental in reducing collateral demand by users who do not have the resources to develop internal models. Potential for disputes is minimized by the use of bank models by their clients, but even for commercial portfolio margining systems, the material netting benefits outweigh possible dispute risks.

While the above suggestions could alleviate the envisioned collateral bottleneck, another potential problem exists with the variations that exist (and will exist) among the various internal models as well as commercially available portfolio margining models. One could envision a scenario under which all market participants use the same model. But as aspirational as this may be, it is highly improbable. And, as explained below, the variation among these models will persist, with the undesirable side-effect of producing different estimates of IM, giving rise to disputes. Allowance for differences within some tolerable range (and considering them as part of the allowable threshold amount) might be a way to deal with such disputes.

[20] European Market Infrastructure Regulation

Going a step further to capture as many of the benefits of netting as possible, ISDA believes that in addition to netting of all products within an asset class, netting across asset classes should be allowed. We note the reluctance of BCBS/IOSCO to allow cross- asset netting but we highlight that netting across such products is currently allowed under ISDA agreements. Furthermore, banks must be permitted to apply such models across asset classes - particularly between FX and other asset classes, and potentially between cleared and non-cleared instruments - if they can demonstrate that the consideration of cross-asset risk is appropriate and conservative.

B. ***With respect to internal models in particular, are the proposed parameters and prerequisite conditions appropriate?*** Presently, counterparties agree bilaterally to the terms of any IM component of a collateral arrangement. This ensures that both parties value the IM amount in the same manner and thus avoid any collateral disputes over IM. As a result, existing dispute resolution procedures are designed to resolve collateral disputes associated with VM only. In the proposed regulatory regime, the two parties to an OTC contract are allowed to utilize (each their own) different prudentially approved models for the calculation of IM. As such, a rigid application of the proposed approach for calculating IM could become unworkable and could quite possibly introduce a new and potentially systemically significant source of unresolvable collateral disputes to the OTC derivative market. Regulators have proposed that IM requirements generated by models from different firms be examined and the results compared. However, no such mechanism currently exists to perform such analysis nor is it clear how one firm will convince another that their model is more appropriate in any given circumstance. The imposition of more widespread IM requirements will exacerbate the issue.

C. ***If not, what approach to the calculation of baseline initial margin would be preferable and practicable, and why?*** ISDA fully supports the proposal in that the use of internal models should be intended to produce appropriately risk-sensitive assessments of potential future exposure so as to promote robust margin requirements. Market participants, working with regulators have developed sophisticated models which capture the netting benefits accruing from diversification effects across products within asset classes, as well as across asset classes. ISDA, however, disagrees with the aspects of the proposals, as currently formulated, which permit netting within well-defined asset classes only, but not across such asset classes. These are well-established risk diversification and legally enforceable effects between different asset classes and the proposals should allow for these benefits to be taken into account. As much as correlations among asset classes can be unstable, there are techniques available which overcome these difficulties (e.g., historical VAR, which looks at many possible scenarios and adopts a "worse case"). It is important that all netting and diversification effects are recognized.

Finally, ISDA strongly supports the ability of market participants to cross-margin between cleared and non-cleared trades. The OTC derivatives market is currently experiencing a significant transition as central clearing is being implemented. As central clearing applies only to "standardized" derivative transactions, market participants increasingly find themselves in situations where they have to split well hedged positions, into a component that is centrally cleared (and margined separately with a CCP), and another that remains non-cleared (and which now has to be separately hedged and margined). For example, a $200 million swaption trade that was fully hedged with the appropriate amount of interest rate

swaps (and thus little or no margin requirement), will now attract margin requirements on both the interest rate swap hedge (which is cleared with a CCP), and now IM with the swaption counterparty. Inability to allow participants to cross-margin will further compound pressure on the collateral market and on the liquidity needs of market participants.

Q14.

A. Should the model-based initial margin calculations restrict diversification benefits to be operative within broad asset classes and not across such classes as discussed above?

B. If not, what mitigants can be used to effectively deal with the concerns that have been raised?

A. ***Should the model-based initial margin calculations restrict diversification benefits to be operative within broad asset classes and not across such classes as discussed above?*** As stated in the response to Question 13, ISDA believes the model-based initial margin calculations should not restrict diversification benefits to be operative within broad asset classes but rather should include diversification benefits across such classes. ISDA proposes that diversification benefits across asset classes should be taken into consideration in model-based IM calculations, when there is legal and accounting certainty regarding the ability achieve such diversification through netting and offsetting.

B. ***If not, what mitigants can be used to effectively deal with the concerns that have been raised?*** As stated above, ISDA believes that netting benefits should be fully allowed; both across asset classes, and across cleared and non-cleared products. Failure to do so can only lead to exaggerated demands for collateral in a way that does not correspond to true risk.

Q15.

A. With respect to the standardized schedule, are the parameters and methodologies appropriate?

B. Are the initial margin levels prescribed in the proposed standardized schedule appropriately calibrated?

C. Are they appropriately risk sensitive?

D. Are there additional dimensions of risk that could be considered for inclusion in the schedule on a systematic basis?

A. ***With respect to the standardized schedule, are the parameters and methodologies appropriate?*** The fundamental problem with the proposed standardized look-up schedule is that it is applied on gross activity (gross notional amounts), leading to a vast overestimation of margin requirements. Diversification (and thus netting) across products is not possible. At a minimum, it should be applied on net activity (net notional amounts) per asset class. Another shortcoming is its failure to recognize the further netting efficiencies that exist across asset classes. Furthermore, the standardized schedule is based on time to maturity. This makes its application for more complex products problematic (i.e., for a 2x10 swaption, is the tenor 2, 10 years, or 12 years). The cumulative result of the above is limited applicability and a gross exaggeration in the calculated margins which makes the use of the proposed schedule either grossly uneconomical or not feasible.

As much as it is understood that the look-up method is envisioned as an alternative for simplified portfolios, or where internal models cannot be used, potential delays in the approval of internal models could lead to a de-facto adoption of the look-up tables with catastrophic implications for collateral liquidity.

B. ***Are the initial margin levels prescribed in the proposed standardized schedule appropriately calibrated?*** The proposed parameters exaggerate the magnitude of risks intended to be covered by the look-up based IM calculation. Analytical work based on Monte Carlo simulations undertaken by ISDA and market participants, indicates that the parameters listed in the look-up tables overestimate risk by 2 to 3 times for individual transactions and much more for large diversified portfolios. Please see Appendix 3, which contains the analysis.

C. ***Are they appropriately risk sensitive?*** When viewed at a transactional level, the IM calibration is risk sensitive. However, when results are aggregated across portfolios of transactions, the risk sensitivity disappears completely, making these measures ineffective and inappropriate for the purpose of establishing IM.

D. ***Are there additional dimensions of risk that could be considered for inclusion in the schedule on a systematic basis?*** For the standardized look-up schedule to become credible and thus usable, it must begin to take into account the netting benefits that exist. But this is what internal models accomplish, and the effort involved to do this correctly is extensive. The gap between the two efforts is very significant. As such, ISDA recommends that the BCBS/IOSCO group adopt ISDA's proposals and recommendations regarding internal models.

Q16.

A. Are the proposed methodologies for calculating variation margin appropriate?

B. If not, what approach to the calculation of baseline variation margin would be preferable, and why?

A. ***Are the proposed methodologies for calculating variation margin appropriate?*** As explained in the response to Question 13, ISDA strongly advocates that all netting and diversification effects should be recognized when calculating margin levels, be they IM or VM.

B. ***If not, what approach to the calculation of baseline variation margin would be preferable, and why?*** Please see response above.

Q17.

A. With what frequency should variation margin payments be required?

B. Is it acceptable or desirable to allow for less frequent posting of variation margin, subject to a corresponding increase in the assumed close out horizon that is used for the purposes of calculating initial margin?

A. ***With what frequency should variation margin payments be required?*** The appropriate baseline is that current exposure should be sufficient frequency as determined by the parties. Daily VM exchange may not be feasible in certain cases where either the transaction itself, or the collateral posted and frequency should be adjusted accordingly. In such cases, valuation and exchange of VM could take place less frequently than daily and the appropriate frequency determined by the Covered Entity.

B. ***Is it acceptable or desirable to allow for less frequent posting of variation margin, subject to a corresponding increase in the assumed close out horizon that is used for the purposes of calculating initial margin?*** As stated above, ISDA believes that the appropriate baseline is that current exposure should be determined by the parties.

Q18.

A. Is the proposed framework for variation margin appropriately calibrated to prevent unintended pro-cyclical effects in conditions of market stress?

B. Are discrete calls for additional initial margin due to "cliff-edge" triggers sufficiently discouraged?

A. ***Is the proposed framework for variation margin appropriately calibrated to prevent unintended pro-cyclical effects in conditions of market stress?*** ISDA agrees with the principle that pro-cyclicality should be avoided. ISDA also agrees with the principle of VM exchange as it avoids the accumulation of unrecognized losses with counterparties that could, at some point, become a source of instability to the system. However, it is equally clear that VM calls, following instances of large market moves, could potentially lead to liquidity stress conditions for the counterparties involved. Such pressure on liquidity would become more severe during periods of market stress, inducing pro-cyclicality if IM market sensitive requirements are added. If IM requirements were to be imposed, ideally, firms should have the ability to alter IM practices in response to market conditions and observed levels of volatility in specific instruments or asset classes, without generating pro-cyclical effects.

Moreover, when one considers demands on collateral created by cleared trades, but also non-cleared trades, Solvency II as well other aspects of Basel III, a case of "collateral shock" may be created whereby, because of market conditions, demand for certain classes of collateral may increase dramatically. In certain markets/currencies it may simply not be possible to source the necessary collateral simply because there is insufficient eligible collateral to satisfy demand. ISDA therefore urges regulators to permit, where appropriate, the widest possible definition of collateral consistent with the objectives of this proposal. This should include, without limitation, standby letters of credit and/or commercial bank guarantees, especially in the case of 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 than banks.

Finally, ISDA notes the possibility of disputes. Efforts to maximize legally enforceable netting benefits imply intensive use of internal models which, because of their proprietary nature, may be producing different outputs. The potential for disputes is larger between the larger banks and end users who do not have the benefit of such models. ISDA would propose that BCBS/IOSCO balance the risks involved in allowing larger minimum amounts,

versus the benefit of allowing space for compromise in disputed cases. ISDA also recommends that enough time is allowed for participants to put in place standardized mechanisms to implement all the proposed measures.

B. ***Are discrete calls for additional initial margin due to "cliff-edge" triggers sufficiently discouraged?*** The "cliff-edge effect" is produced when, during periods of market stress, margin requirements are increased to reflect the increased riskiness. As such, they tend to put additional pressure on liquidity and create pro-cyclicality. Such effects are primarily associated with the imposition of IM requirements. Since IM has to be market sensitive, IM requirements would typically rise significantly during periods of markets stress and in a direct function of observed volatilities. This is one of the reasons ISDA believes that IM requirements are not suitable for achieving systemic resiliency. ISDA's recommends that market participants should be able to manage the riskiness of their portfolios over time, and not have changes in the IM framework compensating for their failure to do so.

Q19. What level of minimum transfer amount effectively mitigates operational risk and burden while not allowing for a significant build-up of uncollateralised exposure?

As stated above, ISDA believes that a *de-minimis* Minimum Transfer Amount is necessary to avoid the cost of small movements of collateral that convey no appreciable risk protection, and to allow some room for valuation differences. The CFTC have suggested $100,000 equivalent for this purpose, which ISDA considers appropriate.

Q20.
A. Is the scope of proposed eligible collateral appropriate?
B. If not, what alternative approach to eligible collateral would be preferable, and why?

A. ***Is the scope of proposed eligible collateral appropriate?*** ISDA welcomes the expanded range of collateral but it may not be sufficient. We have stated on several occasions throughout this response, the potentially dramatic impact these proposals could have on collateral liquidity. These demands come at a time when increased use of clearing and Basel III liquidity requirements are expected to generate additional layers of demand for the same sort of collateral. Taking this into account, the proposed regulation should not increase this pressure even more by mandating collateral for bilateral transactions in the manner outlined in this proposal.

The parties involved are in the best position to negotiate what collateral they are willing to accept, apply appropriate haircuts to cater for quality and liquidity, as well as factor in other factors such as wrong way risk and concentration. By applying a "one-shoe-fits-all" approach, rigidities are introduced in the system. It should also be noted that bilateral collateral does not need to be as liquid as collateral used in CCPs. All of the above imply that regulators should carefully consider all these factors before they proceed with their proposals.

B. ***If not, what alternative approach to eligible collateral would be preferable, and why?*** As we have stated repeatedly throughout this document, ISDA believes it should be in the

judgment of the parties involved to decide what is acceptable, the appropriate haircuts the adequacy of which can be reviewed by supervisors via vertical or horizontal reviews. ISDA would like to point out that collateral recognized for lending transactions includes all manner of plant, machinery, inventory, real estate and other tangible assets including commodities. In addition, convertible bonds are also included along with high quality debt securities issued by financial institutions and certain units in collective investment undertakings. ISDA suggests that the list of eligible collateral should include these categories of collateral, although the parties would have to agree as to what constitutes acceptable collateral.

If the eligible collateral for bilateral transactions is restricted to only very liquid, high credit quality collateral, market participants will have to 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. The overall results would be that no risk would be mitigated.

Transformation of non-standard collateral types through repo lines would put further pressure on bank balance sheets in an environment where the European Central Bank requires high quality collateral – in the context of the LTRO – in order to provide 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 will be 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). Therefore, we support extension of the forms of eligible collateral to include, where appropriate, bank guarantees and letters of credit.

In the case of regulated financial entities, the capital regime already differentiates between different qualities of collateral and 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. Collateral transformation will have the effect of lowering the quality of collateral in the hands of other financial and non-financial participants.

Finally, another important driver is also how correlated the collateral and the exposure are. Some collateral types that could be seen as more risky (e.g. loans), could be much less correlated with exposures than government bonds.

Q21.

A. Should concrete diversification requirements, such as concentration limits, be included as a condition of collateral eligibility?

B. If so, what types of specific requirements would be effective?

C. Are the standardised haircuts prescribed in the proposed standardised haircut schedule sufficiently conservative?

D. Are they appropriately risk sensitive?

E. Are they appropriate in light of their potential liquidity impact?

F. Are there additional assets that should be considered in the schedule of standardised haircuts?

A. ***Should concrete diversification requirements, such as concentration limits, be included as a condition of collateral eligibility?*** As can be deduced by our stances on similar issues, ISDA firmly believes that the parties involved in a transaction are in the best position to determine how to best protect themselves and put in place the proper risk mitigation conditions. Any attempt to do so from above and in a way that applies equally with no reference to the credit quality of the counterparty, and/or the specifics of that particular transaction, is likely to lead to suboptimal results. If concentration limits are to be considered, they have to be based on true risks (arrived after taking advantage of all legally enforceable netting possibilities), and not other methods such as notional amounts.

B. ***If so, what types of specific requirements would be effective?*** ISDA believes that the best outcome is achieved if left to the parties involved to determine such requirements.

C. ***Are the standardised haircuts prescribed in the proposed standardised haircut schedule sufficiently conservative?*** The main drawback on the proposed schedule is that it views the riskiness of individual transactions in isolation, totally ignoring the powerful risk reduction qualities of netting. This is something that has also been brought out in several places in the document. However, even when viewed in isolation, the proposed standardized haircut schedule is too conservative, as our calculations indicate that the factors contained in the schedule lack granularity (they are too simplistic) and lead – in most cases – to estimates that are 2 to 3 times for individual transactions (and much more for large diversified portfolios). These are more conservative than the industry's estimates (please see Appendix 3, for a more detailed analysis).

D. ***Are they appropriately risk sensitive?*** Please see response above. Again, as we have stated previously, while the numbers are somewhat risk sensitive on a transaction by transaction basis, they cease to be so once they are applied to portfolios of trades because they do not allow for any netting either across an asset class and/or across asset classes.

E. ***Are they appropriate in light of their potential liquidity impact?*** ISDA would strongly discourage the use of the schedule, except in isolated case of portfolios comprising single transactions, or transactions that cannot be dealt with by approved internal models.

F. ***Are there additional assets that should be considered in the schedule of standardised haircuts?*** The limitations of this approach make them unsuitable generally speaking, per our responses above.

Q22.

A. Are the proposed requirements with respect to the treatment of provided margin appropriate?

B. If not, what alternative approach would be preferable, and why?

C. Should the margin requirements provide greater specificity with respect to how margin must be protected?

D. Is the proposed key principle and proposed requirement adequate to protect and preserve the utility of margin as a loss mitigants in all cases?

A. ***Are the proposed requirements with respect to the treatment of provided margin appropriate?*** The proposed requirements with respect to the treatment of provided collateral (gross, segregated, and no re-hypothecation), when viewed in isolation are logical, but not appropriate when their aggregated effects are considered. We have stated repeatedly that that setting margin requirements on gross basis – with no allowance for netting - leads to vast overestimation of margin requirements in a manner that is not proportional to risk exposures.

While no re-hypothecation is one way of ensuring immediate access to and security of collateral, it is likely to exacerbate the shortage of collateral that is likely to arise from these proposals, by "locking away" collateral that could otherwise be recycled in the market for the funding of the general economy. In this respect, it should be noted that simply dictating no re-hypothecation without any assurance that local legal systems provide protection is an expensive initiative with no effect and no actual protection. In fact, the requirement to post collateral in jurisdictions which do not support the legal concept of netting could potentially increase systemic risk. ISDA believes that it is important for the safety, security and liquidity of OTC markets, and for the health of the general economy as a whole, that any IM requirements are appropriately calibrated taking the above into account. If they are, restrictions on re-hypothecation become less important as they affect a much smaller amount of collateral.

B. ***If not, what alternative approach would be preferable, and why?*** ISDA believes that arrangements in respect to IM should be offered to all counterparties however the details should be a matter for negotiation and agreement between the counterparties involved. If BCBS adopts the proposals, ISDA would recommend that a suitable period be allowed for these arrangements to be phased in as segregation and re-hypothecation depends on the local law and insolvency regulation in each jurisdiction. As has been the experience in the Lehman and MF Global cases, the interaction between the local laws of different jurisdictions can be lengthy and complex.

C. ***Should the margin requirements provide greater specificity with respect to how margin must be protected?*** ISDA recommends that, if they truly want to support more collateralization, lawmakers step in and push for harmonization of bankruptcy legislation in the various jurisdictions. It is 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.

D. ***Is the proposed key principle and proposed requirement adequate to protect and preserve the utility of margin as a loss mitigants in all cases?*** Segregation and re-hypothecation of IM should be offered, but not be made mandatory. As stated above, both segregation and no re-hypothecation – when properly structured – offer additional protection to the parties involved. But doing so, leads to increases in the cost of providing such products. The BCBS/IOSCO should be aware that mandating segregation would substantially increase the cost of doing business for non-financial counterparties and commodity trading firms within the non-banking sector. If also made applicable to (smaller) non-financial counterparties, the

additional cost for trading and resulting liquidity constraint might easily push smaller parties out of the market altogether. Requiring companies to offer segregation would lead to increase in: cost of tying up liquidity for segregation; cost of additional borrowing to fulfill segregation requirements; and cost attached to the segregation itself (systems have to be installed).

Paradoxically, mandating posting of IM will lead to significantly higher credit risk in certain cases. For those required to post and segregate collateral in jurisdictions where the necessary legal and regulatory infrastructure for such activity does not exist, doing so may increase counterparty risk. ISDA asks BCBS/IOSCO to recognize that many jurisdictions may not be suited for the application of such proposal. Unless all jurisdictions 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, the implementation of these proposals would be inappropriate.

Q23.

A. Is the requirement that initial margin be exchanged on a gross, rather than net basis, appropriate?

B. Would the requirement result in large amounts of initial margin being held by a potentially small number of custodian banks and thus creating concentration risk?

A. ***Is the requirement that initial margin be exchanged on a gross, rather than net basis, appropriate?*** Netting is a fundamental concept that is used extensively in financial markets, having the important benefit of reducing exposures in cases where positions offset each other. So, the concept of posting on a gross basis, without netting, goes against this fundamental practice in the market place. Posting on gross basis is one of the drivers that lead to substantial size of the incremental collateral requirements associated with the proposals. ISDA strongly believes that IM should be exchanged on a net, rather than a gross basis, where the legal basis for netting and offsetting exists.

B. ***Would the requirement result in large amounts of initial margin being held by a potentially small number of custodian banks and thus creating concentration risk?*** As much as requiring segregation of IM posted is desirable as it provides better security and more immediate access to the collateral posted, it is expensive and would typically involve the addition of a custodian bank in the transaction chain. As the number of banks specializing in custody is relatively small, a new source of risk will be created from concentration risk.

Q24.

A. Should collateral be allowed to be re-hypothecated or re-used by the collecting party?

B. Are there circumstances and conditions, such as requiring the pledgee to segregate the re-hypothecated assets from its proprietary assets and treating the assets as customer assets, and/or ensuring that the insolvency regime provides the pledger with a first priority claim on the assets that are re-hypothecated in the event of a pledgee's bankruptcy, under which re-hypothecation could be permitted without in any way compromising the full integrity and purpose of the key principle?

C. What would be the systemic risk consequences of allowing re-hypothecation or re-use?

A. ***Should collateral be allowed to be re-hypothecated or re-used by the collecting party?*** According to the proposed rules, IM collateral, if posted under the currently proposed rules, should be held in segregation at third party custodians without the opportunity for re-hypothecation. No re-hypothecation implies that assets that would otherwise be used to facilitate lending to businesses for capital improvements, business expansion and economic and employment growth, will not be available. ISDA believes that contracting parties should be given the opportunity to consider re-hypothecation or re-use of collateral posted by the collecting party, if the arrangement meets their commercial interest. Preventing voluntary re-hypothecation is inconsistent with current market practice, and it would exacerbate the significant collateral needs envisioned by the application of these proposals. The end result would be significantly increasing the trading costs of derivatives that would ultimately deter participants from using these products to hedge unwanted economic risks. A party collecting IM should offer segregation as an option so the parties can agree on segregation if commercially appropriate.

B. ***Are there circumstances and conditions, such as requiring the pledgee to segregate the re-hypothecated assets from its proprietary assets and treating the assets as customer assets, and/or ensuring that the insolvency regime provides the pledger with a first priority claim on the assets that are re-hypothecated in the event of a pledgee's bankruptcy, under which re-hypothecation could be permitted without in any way compromising the full integrity and purpose of the key principle?*** The degree of protection varies by jurisdiction and to a large extend depends on the process used to transfer collateral.

C. ***What would be the systemic risk consequences of allowing re-hypothecation or re-use?*** Allowing re-hypothecation would go some way towards alleviating the pressure on demand for incremental collateral.

Q25.

A. Are the proposed requirements with respect to the treatment of non-centrally-cleared derivatives between affiliated entities appropriate?
B. If not, what alternative approach would be preferable, and why?
C. Would giving local supervisors discretion in determining the initial margin requirements for non-centrally-cleared derivatives between affiliated entities result in international inconsistencies that would lead to regulatory arbitrage and unlevel playing field?

A. ***Are the proposed requirements with respect to the treatment of non-centrally-cleared derivatives between affiliated entities appropriate?*** ISDA believes it is important that inter-affiliate trades are excluded from margin arrangements. The proposed margin rules would require covered entities to exchange IM on inter-affiliate trades. ISDA requests that such trades be excluded from margin requirements.[21] Swaps between affiliates of a single entity do not add systemic risk. Losses in the trade that accrue to one affiliate are equally offset by gains to the other affiliate as such trades are used as an internal risk allocation tool. Imposing

[21] ISDA and SIFMA comment letter re: Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants dated July 11, 2011, pp. 28-29.

IM requirements would lead to increases in the cost and sacrifices in the efficiency of using swaps for internal risk management. The Study itself notes that these trades "frequently serve risk management or other purposes that are different from non-cleared derivative transactions with third parties" and that the imposition of margin requirements on these trades "could tie up substantial liquidity".[22] Hence, the BCBS/IOSCO Working Group chose not to impose margin requirements on inter-affiliate trades, instead leaving it to the discretion of national supervisors.[23] We respectfully urge BCBS/IOSCO to expressly recommend that margin is not posted for such trades in accordance with the EMIR proposals.

B. ***If not, what alternative approach would be preferable, and why?*** Please see response above.

C. ***Would giving local supervisors discretion in determining the initial margin requirements for non-centrally-cleared derivatives between affiliated entities result in international inconsistencies that would lead to regulatory arbitrage and unlevel playing field?*** That is precisely the risk with this approach.

Q26.

A. Should an exchange of variation margin between affiliates within the same national jurisdiction be required?

B. What would be the risk, or other, implications of not requiring such an exchange?

C. Are there any additional benefits or costs to not requiring an exchange of variation margin among affiliates within the same national jurisdiction?

A. ***Should an exchange of variation margin between affiliates within the same national jurisdiction be required?*** Although ISDA firmly believes that daily exchange of VM between entities is an appropriate and necessary tool for managing counterparty risk, we remain concerned with proposals to broadly mandate its exchange. VM exchange acts a relief valve, alleviating pressures during periods of market stress when unrealized losses are created by sharp market moves. It is the accumulation of such unrealized losses that, left unattended, create the conditions for problems in counterparty relations – a potential source of systemic risk.

However, For the same reasons that inter-affiliate clearing should not be imposed (i.e., the absence of new risks, the fundamentally different character of default risk among group entities and the lack of a direct relationship between intra-group credit arrangements and the counterparty risks faced by third parties), ISDA believes the imposition of a VM requirement on transactions between such affiliates is unnecessary and undesirable. Any benefits from the VM requirement to a group member's external swap counterparties are tenuous at best because such counterparties are exposed to credit risks arising from the group member's entire balance sheet. Finally, the additional liquidity demands resulting from variation margin will distort the group's risk management choices.

[22] Study, p. 28.

[23] Study, pp. 27-28.

Moreover, ISDA believes that IM exchange between affiliates should be excluded from the requirements. It is not necessary to protect group entities from the credit risk of other group entities. Typically, group management, through its comprehensive knowledge of the group and its control over the allocation of capital and liquidity and the exercise of remedies among group members, possesses the tools needed to resolve potential defaults within the group. Majority common ownership among group members is usually a sufficient indication of a commonality of economic interest among group members to ensure that such credit risks are internalized within the group.

B. ***What would be the risk, or other, implications of not requiring such an exchange?*** See response to previous question.

C. ***Are there any additional benefits or costs to not requiring an exchange of variation margin among affiliates within the same national jurisdiction?*** See response to Part A above.

Q27.

A. Is the proposed approach with respect to the interaction of national regimes in cross-border transactions appropriate?

B. If not, what alternative approach would be preferable, and why?

A. ***Is the proposed approach with respect to the interaction of national regimes in cross-border transactions appropriate?*** ISDA is supportive of the view that regulatory regimes should interact so as to result in sufficiently consistent and non-duplicative regulatory margin requirements for non-cleared derivatives across jurisdictions. We also note that more work is needed on the regulatory framework to collateralize transactions with counterparties 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.

Clarification of rules within the cross-border context is essential as the proposed rules are very unclear on various points. For example, it is unclear as to which regulatory regime defines what is to be posted and what is received? Why should counterparties have different margin levels due to different regulators? Local regulators should make sure the framework creates a level playing field.

B. ***If not, what alternative approach would be preferable, and why?*** ISDA agrees with the emphasis being put on implementation of the proposals with the maximum level of consistency between regulatory regimes. However, where inconsistencies in market infrastructure and regulation exist between jurisdictions involved in a swap and margin collection may increase rather than decrease risk to one or more of the counterparties BCBS/IOSCO should provide flexibility that will allow Covered Entities to employ other methods to reduce risk in the transaction. For example, there are jurisdictions which do not have clearing organizations and jurisdictions which do not recognize netting and standard collateral arrangements. For swaps involving such jurisdictions, the party outside those jurisdictions may face increased risk due to margin requirements.

Appendix 1: Estimates of, and associated methodologies applied to calculate additional IM collateral requirements

The following table aims at explaining the various quantitative impact estimates performed by the Industry to assess the impact of the BCBS/IOSCO proposals in terms of additional IM requirements:

Type of Estimate	Applied Methodology	Formula	Results (USD)
Estimate 1: Additional IM requirements if the BCBS/IOSCO proposals are implemented in the current environment, assuming half of the eligible notional falls under dealer's own internal models, and thresholds are negotiated between parties.	1. The starting point is the size of global OTC derivatives market. Using BIS statistics, the outstanding notional amount of the OTC derivative market at the end of 2011 was $648 trillion globally. (Excluding double-counting adjustments) 2. In order to come up with the population of trades on which margin would be applied, cleared trades are removed. In addition, we remove the categories of trades by counterparties that would be exempted from posting Collateral (such as, sovereigns, central banks and non-systemically important entities), estimated at 20%. a. BIS estimates that 55% of the amount outstanding is cleared – reducing the global notional to $648 trillion x (1-55%) – most cleared trades are rates derivatives b. ISDA estimates that 20% of the non-cleared outstanding notional amount is accounted by exempted counterparties, leading to a further 20% reduction of the target outstanding 3. It is further assumed that 50% of the remaining target outstanding amount is accounted by large banks which use internal models treatment (i.e. modeling potential future exposures ("**PFE**") and producing risk sensitive IM calculations, taking into account trade maturities and where risk diversification produces margin reduction benefits). The other 50% would fall under the proposed standard BCBS/IOSCO methodology. 4. The estimates of IM amounts produced need to be doubled as each party involved in a bilateral exchange	For *i* covering all asset classes and maturities for derivatives falling under the standardized method, and *j* covering all asset classes and maturities for derivatives falling under IMM: $\left[\frac{2\times T}{1-H_{Average}}\right]\times\left[\sum_{i}\left[N_{Std}\times S_{Std}\right]+\sum_{j}\left[N_{IMM}\times S_{IMM}\right]\right]$ Where: - T is the mitigating impact resulting from the use of thresholds. - $H_{Average}$ is the average level of haircut applied to IM collateral posted. - N_{Std} is the notional of all derivatives falling under the standardized method. - S_{Std} is the IM percentage requirements under the standardized schedule. - N_{IMM} is the notional of all derivatives falling under dealer's internal models. - S_{IMM} is the IM percentage requirements under the IMM schedule.	**$15.7 tr**

	have to post/exchange IMs. 5. In order to reflect the effect of the BCBS/IOSCO proposed thresholds, the IM amounts are further reduced by (an estimated) 20%. 6. Finally, an estimate of the required posted collateral is arrived at by taking into account the BCBS/IOSCO proposed collateral haircuts. It is assumed to be 10% on average.		
Estimate 2: Additional IM requirements if the BCBS/IOSCO proposals are implemented in the current environment, assuming no use of threshold and all the eligible notional falls under the standardized schedule[24].	Same methodology as estimate 2 above, except: - Point 3 where it is assumed that all remaining target outstanding derivative amounts fall under the proposed standardized BCBS/IOSCO methodology. - Point 5 where we assume no use of threshold.	Same generic formula as estimate 2 above.	**$29.9 tr**

[24] Proposed Standardized IM Schedule, Appendix A of the BCBS226 Consultation Document

Appendix 2: Assumptions and Calculations Underlying Estimates of Incremental IM Collateral Requirements:

Share of the non-cleared OTC market exempted from IM requ.:	20%
Share of the non-cleared non-exempt OTC market falling under internal models:	50%
Average level of collateral haircut:	10%
Mitigating effect from Threshold on Initial Margin level:	20%

Estimated Additional Initial Margin Requ. (USD trn):
15.7

Notional amounts outstanding (USDbn unless stated otherwise)

Contract Type	Maturity (years)	Uncleared Notional (Global)	Non-cleared & non-exempted	IMM IM Requ. (% not.)	Std IM Requ. (% not.)	Estimated Init. Margin (Glob.)
Total		**316,212**	**252,970**			**15,662**
Foreign exchange contracts		**63,349**	**50,679**			**4,599**
Forwards and forex swaps	< 1	21,807	17,446	4.2%	6%	1,582
	1 - 5	6,030	4,824	5.0%	6%	472
	> 5	2,688	2,151	5.1%	6%	212
Currency swaps	< 1	16,282	13,025	4.0%	6%	1,158
	1 - 5	4,502	3,602	4.6%	6%	339
	> 5	2,007	1,606	4.6%	6%	151
Options	< 1	7,255	5,804	4.1%	6%	521
	1 - 5	2,223	1,778	2.3%	6%	131
	> 5	554	443	2.3%	6%	33
Interest rate contracts		**174,098**	**139,278**			**3,359**
Forward rate agreements	< 1	5,631	4,505	0.1%	1%	44
	1 - 5	4,674	3,739	0.3%	2%	76
	> 5	3,443	2,754	0.3%	4%	105
Interest rate swaps	< 1	44,826	35,861	0.1%	1%	351
	1 - 5	37,206	29,765	0.4%	2%	635
	> 5	27,407	21,926	1.2%	4%	1,013
Options	< 1	13,719	10,976	1.2%	1%	215
	1 - 5	22,350	17,880	0.4%	2%	381
	> 5	14,842	11,874	1.1%	4%	538
Equity-linked contracts		**5,982**	**4,786**			**980**
Forwards and swaps	< 1	1,049	839	5.8%	15%	155
	1 - 5	524	419	5.7%	15%	77
	> 5	166	132	6.0%	15%	25
Options	< 1	2,002	1,601	6.8%	15%	310
	1 - 5	1,769	1,416	10.9%	15%	326
	> 5	473	378	10.9%	15%	87
Commodity contracts		**3,091**	**2,473**			**629**
Gold	< 1	440	352	7.4%	15%	70
	1 - 5	79	63	9.0%	15%	13
	> 5	3	2	8.7%	15%	0
Other commodities	< 1	1,194	955	16.7%	15%	269
	1 - 5	1,229	983	13.3%	15%	247
	> 5	147	118	12.2%	15%	28
Credit default swaps		**27,083**	**21,666**			**1,247**
Single-name instruments	< 1	1,856	1,485	0.9%	2%	38
	1 - 5	11,047	8,837	0.9%	5%	463
	> 5	3,042	2,434	1.0%	10%	238
Multi-name instruments	< 1	1,296	1,037	0.8%	2%	26
	1 - 5	7,716	6,173	0.8%	5%	318
	> 5	2,125	1,700	0.8%	10%	163
Unallocated		**42,609**	**34,087**			**4,848**
	< 1	17,793	14,234	1.0%	15%	2,024
	1 - 5	14,970	11,976	1.0%	15%	1,703
	> 5	9,846	7,877	1.0%	15%	1,120

Appendix 3: Comparison between the BCBS/IOSCO standardized IM requirements schedule and a broker-dealer's Internal Model IM estimates for developed markets

The Industry believes that the standardized schedule for initial margin ("**IM**") calculations proposed in the consultation document exhibits unnecessarily large percentages of notional amounts.

Using dealers' internal model methodologies to calculate IM yields significantly smaller percentages of derivatives notionals (on average approximately a third of the standardized schedule percentages for larger asset classes) as shown in the following table:

Contract Type	Maturity (years)	IM Standardized Schedule	IMM IM Calculation	IMM IM as % of Standardized Schedule	Typical instruments used for IMM calculations
Foreign exchange contracts					
Forwards and forex swaps	< 1	6%	4.2%	**70.0%**	1 Month, EUR/USD for DM
	1 - 5	6%	5.0%	**83%**	1 year, same currencies
	> 5	6%	5.1%	**85%**	7 year, EUR/USD for DM
Currency swaps	< 1	6%	4.0%	**67%**	6 Month, USD/CAD for DM
	1 - 5	6%	4.6%	**77%**	5 year, same currencies
	> 5	6%	4.6%	**77%**	6-10 year, same currencies
Options	< 1	6%	4.1%	**68%**	1m bought calls, EUR/USD for DM
	1 - 5	6%	2.3%	**38%**	3 year bought calls, same currencies
	> 5	6%	2.3%	**38%**	7 year bought calls, same currencies
Interest rate contracts					
Forward rate agreements	< 1	1%	0.1%	**10%**	1x7 (months), USD
	1 - 5	2%	0.3%	**15%**	4x4.5 (years), USD
	> 5	4%	0.3%	**8%**	7x7.5 (years), USD
Interest rate swaps	< 1	1%	0.1%	**10%**	1 year, USD/CAD for DM
	1 - 5	2%	0.4%	**20%**	3 year, same currencies
	> 5	4%	1.2%	**30%**	10 year, same currencies
Options	< 1	1%	1.2%	**120%**	Avg 1w-6m, T-Locks
	1 - 5	2%	0.4%	**20%**	Average 1y-5y, Caps @ 1% strike
	> 5	4%	1.1%	**28%**	5 year Caps at 1% strike
Equity-linked contracts					
Forwards and swaps	< 1	15%	5.8%	**39%**	6m, SPTR Swap
	1 - 5	15%	5.7%	**38%**	1y SPTR swap
	> 5	15%	6.0%	**40%**	3y SPTR Swap
Options	< 1	15%	6.8%	**45%**	6m, SPX 1400 call
	1 - 5	15%	10.9%	**73%**	1y, SPX 1400 call
	> 5	15%	10.9%	**73%**	3y, SPX 1400 call
Commodity contracts					
Gold	< 1	15%	7.4%	**49%**	Average 1-6 month
	1 - 5	15%	9.0%	**60%**	Average 1 & 5 year
	> 5	15%	8.7%	**58%**	Average 6 year
Other commodities	< 1	15%	16.7%	**111%**	Average 3-9 month, 8 different energy swaps
	1 - 5	15%	13.3%	**89%**	Average 1-4 year, same swaps
	> 5	15%	12.2%	**81%**	Average 5 year, same swaps
Credit default swaps					
Single-name instruments	< 1	2%	0.9%	**45%**	9 month, bought protection on corporate
	1 - 5	5%	0.9%	**18%**	3 year, bought protection on same corporate
	> 5	10%	1.0%	**10%**	7 year, bought protection on same corporate
Multi-name instruments	< 1	2%	0.8%	**40%**	9 month, bought protection on CDX.IG.18
	1 - 5	5%	0.8%	**16%**	3 year, bought protection on CDX.IG.18
	> 5	10%	0.8%	**8%**	7 year, bought protection on CDX.IG.18

Methodology used for IM calculations based on Internal Models:

We used a proprietary system for calculating credit exposures: a Monte Carlo simulation that is scaled up to a 99% confidence level with a 10 day cure period. The numbers provided in the table above indicate the credit exposure (as a percentage of notional) that is faced over the life of a specific derivative.

The calculations do not incorporate volatility of volatility, and they use historical correlations and volatilities rather than market implied ones.

The trades used are all emphasizing derivative exposures to developed markets, not emerging markets. We believe that developed market exposures represent the majority of the G16[25] major derivative dealers' derivatives exposures.

Industry considerations on the proposed standardized haircut schedule:

ISDA has shared the proposed standardized haircut schedule with market participants, and the consensus is that the proposed standardized haircut schedule does not exhibit enough granularity, which consequently prevents a thorough evaluation of the proposed haircut levels. Many of the proposed factors appear too large or too low to industry estimates, depending on additional asset characteristics which are not reflected in the proposed Appendix B. The industry also thinks that idiosyncratic risk characteristics of certain assets used as collateral should be considered. Below, we list some specific comments:

1. Cash in same/different currency

We note that the table shown in Appendix 2 of the Consultation proposes that cash collateral in a different currency to the underlying exposure would attract an 8% haircut. We believe that some haircut is warranted when there is no management of the risk between the exposure currency and the collateral currency, although an 8% haircut is likely excessive given historical volatilities over the short (typically 1-day) period between margin calls. However, when the parties have in place a specific agreement under which this cross-currency risk is managed, no haircut should apply. We refer specifically to the ISDA Standard Credit Support Annex ("**SCSA**"), which is under development and should be released for use in October of 2012. This new collateral agreement is a highly advanced development of the existing credit support annex documents widely used in the market. It has been developed at the request of market participants and also in consideration of suggestions from ODSG that following the crisis it may be appropriate to review and update the existing CSA documents. The SCSA improves upon and addresses many issues observed with the original credit support annex, and has been widely discussed with (and encouraged by) international supervisors.

The SCSA computes a collateral requirement in the currency of each underlying exposure in a bilateral portfolio, thus ensuring alignment of collateral and exposure currency. Rather than calling for settlement of each collateral currency individually, which would introduce significant cross-currency settlement risk to the market, the SCSA instead calls for net settlement of the different currencies of collateral in a single "Transport Currency." This Transport Currency represents the aggregation of the underlying collateral currencies, but their underlying character

[25] The G16 is a term used for the 16 largest derivatives dealers globally

is preserved because the SCSA requires interest to be accrued based on the underlying collateral currencies (meaning that the Transport Currency used to avoid cross-currency settlement is converted back to each underlying collateral currency so that it can accrue interest). The SCSA also calls for execution of foreign exchange swap transactions or other measures to actively hedge the currency risk between the Transport Currency and the underlying collateral currencies.

It is critical to this important industry development that exposure-aligned, foreign exchange-risk-managed cash collateral under the SCSA *not* be subject to any haircut. This is entirely consistent with the underlying thinking behind the haircut in Appendix 2, but expressed in generalized form. Allowing the SCSA to qualify for no cross-currency risk haircut would also provide an avenue to market participants to maintain collateral efficiency without resorting to the highly dangerous practice of settling each currency of collateral independently - this would be the functional equivalent of Herstatt risk in the FX market but on a far wider and more complex scale.

2. High quality government and central bank securities

The industry thinks that the "high quality" criteria should be more precisely defined in the proposal. In certain cases high quality government bonds have exhibited liquidity that would be more akin to that of equities. Also, the proposed maturity breakdown lacks granularity: the haircut applied by large dealers to securities with 10 years residual maturity is significantly different from the haircut applied to securities with 5 years residual maturity. For example, a dealer would typically apply a 12% haircut to U.S. Treasuries with more than 10 years residual maturity.

3. High quality corporate/covered bonds

The list of assets is here again not granular enough and the definition of "high quality" becomes very important. For example, many dealers would apply a very different haircut depending on whether the corporate bond is AAA or BB rated.

More generally, dealers would apply a larger haircut percentage than the proposed one for high quality corporate bonds: around 10%-12% for shorter dated securities and up to 25% for longer dated ones.

4. Equities included in major stock indices

This asset class is hardly ever accepted as collateral by dealers, and would definitely need to be a constituent of a major index in order to be accepted. The proposed haircut level for this asset class looks very low to the industry as it would generally be in the region of 50% when determined by dealers.

5. Gold

The industry appreciates the fact that gold is accepted by certain CCPs; however it is very rarely accepted by dealers. Flexibility should be given to accept this asset class as collateral or not.

Appendix 4: Increase in the cost of providing a plain vanilla interest rate swap - Methodology and calculations

Example 1

The additional funding and balance sheet costs that large financial institutions, such as banks, will incur if they are required to post IM to their counterparties will inevitably be reflected in the pricing of derivatives contracts. We have estimated that a 10-year interest rate swap that currently prices at a spread of 0.25 basis points on a fully variation margined basis would increase to around a 5 basis point spread if the cost of proposed IM were included. For the purposes of illustration, we select an interest rate swap example because it provides a conceptually and mathematically simple vehicle to illustrate the cost of funding initial margin. Of course, we appreciate that in practice most interest rate swaps will be cleared, except those with clearing-exempt entities, but nevertheless the funding cost analysis presented here is applicable in substantially similar form to other non-clearable products.

We must stress that there are several reasonable assumptions that underlie this illustration, which are fully described below, but we would note in particular that this increase in cost relates to a single trade in isolation; in any portfolio with offsetting positions one would expect the pricing difference may be less material. While we can conclude that the imposition of initial margin will increase costs to the dealer, the degree will depend on idiosyncratic netting effects in the portfolio of each particular client of a dealer; the market place (because if every dealer charged based on their cost of funding then only the one with the lowest cost of funds would trade as all others would be uncompetitive); and a trade that is initial margin reducing might actually trade through the mid-market level.

In this first example, we illustrate the financing costs of initial margin requirements on a standard 10-year interest rate swap. We assume that a dealer is required to post IM for the trade in isolation to counterparty, without any netting for offsetting trades with that counterparty; in practice if the risk that IM were computed against were to be netted across offsetting swaps the overall impact would reduce for non-directional portfolios. Although an IMM model might be used to compute IM, in practice, for this illustration to avoid introducing the proprietary effects of different IMM models we have simply benchmarked the risk calculation as yielding an IM margin requirement equal to 50 times the DV01 of the trade at any time, which is consistent with IM levels that a clearinghouses would require. We assume that the IM requirement is satisfied in cash and the dealer funds their overall IM requirement by issuing unsecured debt at a cost of 2% above the risk-free rate. We note that the costs may be different if the dealer is allowed to post hard-to-fund securities as initial margin with an appropriate haircut, but because of the idiosyncratic cost of funding such assets for each firm and the complexity introduced by modeling balance sheet impact and haircuts we believe the illustration is more useful expressed on a consistent cash basis. In our illustration we also assume that the interest rate curve is flat at 3%. This has relatively little impact on the calculations but simplifies the illustration.

A 10 year interest rate swap has a DV01 of ~8.5 at onset. It thus requires 8.5bp * 50 = 4.26% in IM for the first year. If this is financed at 2% (assuming risk free rates remain close to zero), then the first year's initial margin cost is 4.26% * 2.00% = 8.53 cents. For example, a $100MM 10 year interest rate swap would require $4.26MM in IM, at a cost of $85,300 in the first year to finance. If the swap is retained for its life, the IM funding cost will apply each year, albeit

reducing over time as the DV01 declines. The table below shows the required IM and funding cost for each year:

Year	Remaining Life	DV01	IM (%)	Cost (cents)
1	10	8.53	4.27%	8.53
2	9	7.79	3.89%	7.79
3	8	7.02	3.51%	7.02
4	7	6.23	3.12%	6.23
5	6	5.42	2.71%	5.42
6	5	4.58	2.29%	4.58
7	4	3.72	1.86%	3.72
8	3	2.83	1.41%	2.83
9	2	1.91	0.96%	1.91
10	1	0.97	0.49%	0.97

The cumulative total cost is around 0.49% of notional. Assuming a 3% discount rate, the present value of the IM funding cost is 0.44%, and the running average amount is 5.1 basis points.

Example 2

Using the same methodology as Example 1, we consider a 30y swap assuming a 1% funding cost and 3% risk free rate, with 50x DV01 for IM.

Year 1 IM is 9.8%. Year 1 costs are 9.8 cents, for a cumulative cost of 173 cents or a PV cost of 127 cents, equivalent to 6.46 cents running per year:

Year	Remaining Life	DV01	IM (%)	Cost (cents)
1	30	19.60	9.80%	9.80
2	29	19.19	9.59%	9.59
3	28	18.76	9.38%	9.38
4	27	18.33	9.16%	9.16
5	26	17.88	8.94%	8.94
6	25	17.41	8.71%	8.71
7	24	16.94	8.47%	8.47
8	23	16.44	8.22%	8.22
9	22	15.94	7.97%	7.97
10	21	15.42	7.71%	7.71
11	20	14.88	7.44%	7.44
12	19	14.32	7.16%	7.16
13	18	13.75	6.88%	6.88
14	17	13.17	6.58%	6.58
15	16	12.56	6.28%	6.28
16	15	11.94	5.97%	5.97
17	14	11.30	5.65%	5.65
18	13	10.63	5.32%	5.32

19	12	9.95	4.98%	4.98
20	11	9.25	4.63%	4.63
21	10	8.53	4.27%	4.27
22	9	7.79	3.89%	3.89
23	8	7.02	3.51%	3.51
24	7	6.23	3.12%	3.12
25	6	5.42	2.71%	2.71
26	5	4.58	2.29%	2.29
27	4	3.72	1.86%	1.86
28	3	2.83	1.41%	1.41
29	2	1.91	0.96%	0.96
30	1	0.97	0.49%	0.49

Example 3

Using the same methodology as Examples 1 and 2, we consider a 5y swap, assuming a 2% funding cost and 3% risk free rate, with 50x DV01 for IM.
Year 1 IM is 2.3%. Year 1 costs are 4.58 cents, for a cumulative cost of 14 cents or a PV cost of 13.1 cents, equivalent to 2.86 cents running per year:

Year	Remaining Life	DV01	IM (%)	Cost (cents)
1	5	4.58	2.29%	4.58
2	4	3.72	1.86%	3.72
3	3	2.83	1.41%	2.83
4	2	1.91	0.96%	1.91
5	1	0.97	0.49%	0.97

In addition to the increase in funding cost which in an absolute sense will adversely impact the economics of any transaction, there will also be an impact on profitability - it is obvious that the increased funding cost will erode the profitability of transactions and there will be point where it is simply uneconomic for a dealer to make a market. Because of the dynamic of IM costs accruing over time as they are incurred in comparison with trading revenues which under the mark-to-market accounting methodology are generally locked in up front minus some allowance for future hedging costs, we are concerned that derivatives with IM requirements will be more economically viable to offer to high frequency traders than to entities that are entering into long term hedges of long term commercial risks. The economics of IM may therefore have the unintended consequence of promoting pro-cyclical trading patterns while at the same time denying cost-effective hedging strategies to derivative end users.

Appendix 5: Estimates of the global supply of collateral

According to the International Monetary Fund's Global Financial Stability Report (The Quest for Lasting Stability, April 2012), the total outstanding amount of marketable potentially safe assets is $74.4 trillion[26].

This total $74.4 trillion figure is mostly composed of AAA/AA OECD government securities as emphasized by the following breakdown:

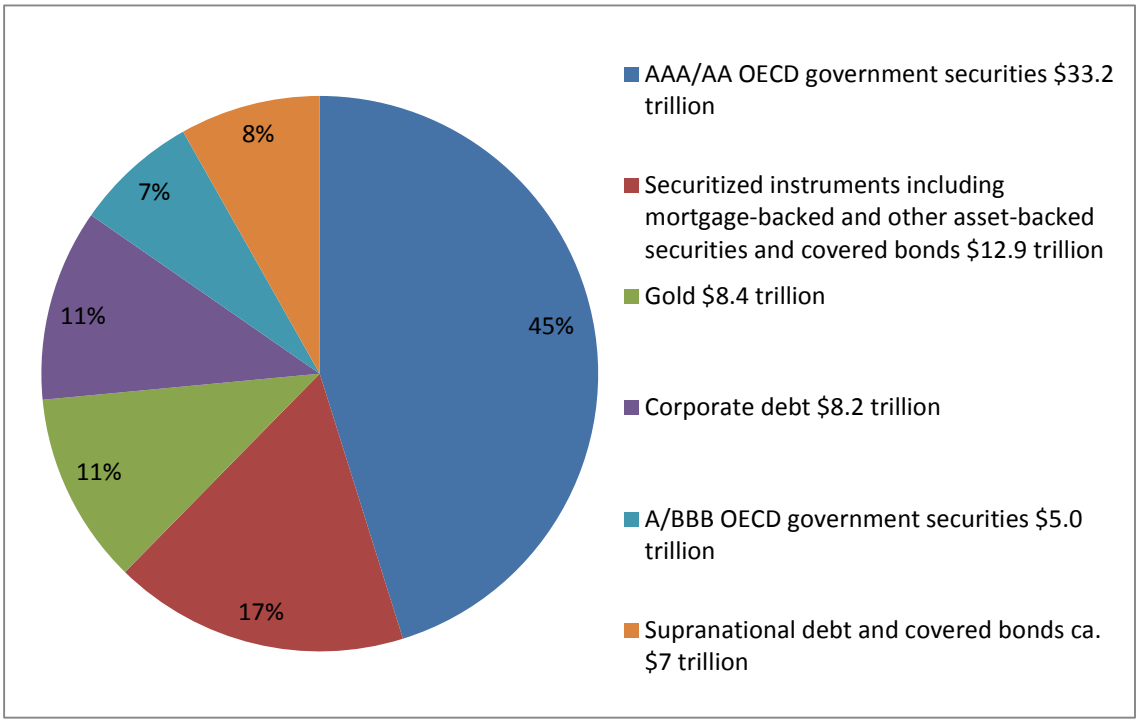
- AAA/AA OECD government securities represent $33.2 trillion (45 percent of the global aggregate),
- Securitized instruments including mortgage-backed and other asset-backed securities and covered bonds represent $12.9 trillion (17 percent of the global aggregate),
- Gold represent $8.4 trillion (11 percent of the global aggregate),
- Corporate debt represents $8.2 trillion (11 percent of the global aggregate),
- A/BBB OECD government securities represent $5.0 trillion (7 percent of the global aggregate),
- Supranational debt and covered bonds compose the rest of the global aggregate representing approximately 8 percent.

The International Monetary Fund's report sets out the holdings of government securities worldwide, which amount to $41.3 trillion. Banks have the largest holding of this asset class with approximately 34 percent.

It is worth noting that most of the global supply of collateral is currently used for multiple purposes and only a fraction of it would be available should large amounts of additional collateral be required.

[26] page 89 of the IMF report

Outstanding amount of marketable potentially safe assets (total = US$74.4 trillion):



Holdings of government securities worldwide, by investor type, end-2010 (total = US$41.3 trillion):