



INTERNATIONAL SWAPS AND DERIVATIVES ASSOCIATION, INC.

# **2011 Roadmap for Collateral Management**

June 30, 2011

## The Roadmap for Collateral Management

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## Introduction

ISDA continues to work with its members and other industry associations to provide an industry-wide coordinated vision of key improvements desired in the collateral management space. With the collaboration of all interested parties, ISDA first published these conclusions in a Roadmap for Collateral Management on June 2, 2009. Continuing to build upon the work that the industry had achieved to date, a further Roadmap was published on April 15, 2010. This June 30, 2011 Roadmap is an extension of a variety of prior initiatives. Each of the previous Roadmaps contained specific implementation steps and timeframes for proposed actions which the industry has largely completed.

In the latest letter to global supervisors (March 2011 Supervisory Letter), the industry committed to review and update the Roadmap to provide further detail in relation to:

- Updated Best Practices for Collateral Management (BP)
- Electronic Messaging Implementation Plan (EM)
- Updated Minimum Market Standards for Portfolio Reconciliation (MMS)

For the population of bilaterally managed OTC derivatives portfolios, the Signatories continue to adopt and improve robust bilateral risk management practices, including the implementation of standardized methods for reconciling portfolios and resolving disputed margin calls.

The recommendations in this updated Roadmap are referenced by the source paper (e.g. MR, IA, or PR<sup>1</sup>) plus a unique number. A comprehensive list of these recommendations can be found in Table 2 which also summarizes the approach taken to address each recommendation.

Recommendations where further work is needed have been formulated into an actionable Market Initiative and added to the Roadmap. There are also recommendations that fall under the category of general market practice and where no further action is required. For example, there are two key recommendations that acknowledge the fundamental nature and benefits of a bilateral market:

- Parties active in the bilateral OTC derivative markets should have the responsibility and the authority to make decisions regarding the credit risk they assume (MR-1)
- Parties to an OTC derivative contract should be free to contract bilaterally for the IA approach that best suits the facts and circumstances that exist between them (IA-9)

This updated Roadmap for Collateral Management contains a series of Market Initiatives the industry will be working on in addition to the Commitments made to global Supervisors in the March 31, 2011 letter. For reference, those new Commitments are:

- Mar 31, 2011 Amend the threshold of G14 dispute reporting from disputes over \$20mm and 15 days to disputes over \$15mm and 15 days for reports starting in April 2011
- Apr 7, 2011 Release a revised draft of the ISDA 2011 Convention on Portfolio Reconciliation and the Investigation of Disputed Margin Calls (the "Convention")
- Apr 26, 2011 Release a revised draft of the ISDA 2011 Formal Market Polling Procedure (the "MPP")
- May 4, 2011 Begin to trial the Convention and MPP for a three month period, ending July 29, 2011 between G14 Members and other interested market participants on a bilateral basis
- May 31, 2011 Enhance G14<sup>2</sup> reports to include disputes both where the reporting entity is calling for collateral and being disputed, and where such reporting

- entity is being called for collateral and disputing. G14 Members will report on the number of disputes that are taken through a polling process during the previous month
- Jun 30, 2011 Investigate the feasibility of achieving a consolidated, anonymized report of large disputes across industry participants
  - Jun 30, 2011 Reduce the threshold for routine portfolio reconciliation of collateralized portfolios from those exceeding 1,000 transactions to those exceeding 500 transactions; these portfolios will be reconciled at least monthly.
  - June 30, 2011 Update the Collateral Roadmap
  - Sep 9, 2011 Publish a revised draft of the ISDA Dispute Resolution Documents reflecting lessons learned in the trial period
  - Sep 9, 2011 Release a phased implementation plan for industry adoption of the revised Dispute Resolution Documents
  - Nov 30, 2011 Update the Best Practices for the OTC Derivatives Collateral Process (BP) document published in June 2010

## 1. Best Practices for Collateral Management

The ISDA Collateral Committee produced a Best Practices for Collateral Management document, which was published on June 30, 2010. The document covers key operational functions important to the end-to-end collateral process. The Best Practices document is meant to be supported by an iterative process and updated on an on-going basis.

**Market Initiative:** Based on feedback over the last year, the Best Practices for Collateral Management document will be updated by November 30, 2011.

## 2. Electronic Communication of Margin Calls

The open standard for facilitating standardized electronic communication of margin calls and key collateral processes was published November 2009. In December 2010, the G14 successfully piloted standardized electronic communication for key collateral processes with their chosen vendor(s) or utilities. The Market Review makes a recommendation (MR-5) to continue the drive towards standardization of format and electronic communication of margin calls in the market; coordinating across market participant firms and vendors who should create fully interoperable solutions that improve market efficiency and reduce systemic risk. In the March 2011 Supervisory Letter, signatories agreed to continue the developmental work with vendors.

**Market Initiative:** Continue developmental work with vendors and the industry to bring at least one commercially viable, robust and mature Electronic Messaging platform for collateral management to market.

At least one vendor has messaging workflow live and in production. They are on-boarding additional customers, both buy-side and sell-side. A second platform is expected to be live in Q3 2011, supporting the electronic messaging service for all of their existing customers.

## 3. Portfolio Reconciliation Implementation Plan

ISDA published an Implementation Plan for Wider Portfolio Reconciliation Market Roll-out in March 2010, which has been mostly completed. Additionally, a Memorandum of Understanding for Asia Pacific was published in 2010, which assisted the industry in achieving further take-up of the portfolio reconciliation process. The Signatories made a commitment in the March 2011 Supervisory letter to reduce the threshold for routine portfolio reconciliation of collateralized portfolios from those exceeding 1,000 transactions to those exceeding 500 transactions.

**Market Initiative:** In order to facilitate achievement of the new Portfolio Reconciliation targets, G14 Members will continue to leverage the Collateralized Portfolio Reconciliation Best Practices (published February 2010) and develop capabilities to provide files, for purposes of portfolio reconciliation, in the defined format from the Updated Minimum Market Standards for Collateralized Portfolio Reconciliation. The Portfolio Reconciliation Data Standards Working Group continues to ensure consistency between data standards being defined for the various asset classes and to identify overlaps, in an effort to further refine the ISDA Minimum Market Standards (MMS).

**Market Initiative:** The Signatories will establish a timeline for publication and adoption of the Updated ISDA Minimum Market Standards, which addresses their publication by August 2011 and allows for incremental adoption of the MMS using a phased approach starting from December 2011 through 2013. Additionally, as Trade Repositories become better defined and utilized on a cross-asset class basis, the Collateral Steering Committee will see if there is any

way to leverage them to further support and streamline the portfolio reconciliation process. Leveraging Trade Repositories may replace this Market Initiative in future versions of this roadmap.

#### **4. Legal Review, Analysis, and Improvements on Current Documentation**

In the Market Review and Independent Amount White Paper there were recommendations made related to improving or amending current documentation. These recommendations are around the feasibility of standardizing treatment of consent for substitution requests (MR-6) and development of standard provisions to facilitate the treatment of segregated IA as a separate pool of collateral (IA-5). Both these recommendations require ISDA legal groups to conduct further review and analysis to determine whether improvements are needed and could be made to current documentation.

**Market Initiative:** ISDA continues to investigate whether the treatment of consent to a substitution request can be standardized between the English CSA and the New York CSA. A working group under the auspices of the Collateral Steering Committee intends to publish a paper entitled "The Market Review of OTC Derivative Bilateral Collateralization Processes - Consensual Substitutions." The review and analysis will be completed on 15 July 2011 with further dates for making the improvements if appropriate.

#### **5. Reducing Barriers to Use of a Third Party in IA Holding Arrangements**

The IA Paper does not recommend a mandate for parties to segregate IA but, recommends that this decision remain a bilaterally negotiated point based on the balance of cost, efficiency, and risk. The Dodd-Frank Act, however, mandates parties to segregate IA in certain instances and in other instances provides a counterparty the option to require IA segregation at its discretion. In light of the above, recommendation (IA-12) outlines a plan for the market to develop standard forms of provisions to facilitate segregation of IA through use of third parties where desired or otherwise required.

**Market Initiative:** ISDA has established a working group consisting of ISDA, MFA, and market participants (including custodians) to develop standard provisions that may be incorporated into documents for Third Party Custodian and Tri-Party Collateral Agent IA holding arrangements in order to facilitate negotiation and consistency of operation for participants who elect to use such arrangements. Consideration should be given to applying these standard provisions to the holding of IA by Dealer Affiliates also, where applicable.

**Market Initiative:** ISDA will develop standard provisions that permit the parties to a New York Law CSA to accommodate treatment of segregated IA as a separate pool of collateral on a rolling basis during the second half of 2011.

#### **6. Promote Efficient Collateralization with CCPs**

As the focus on implementation and increased usage of central counterparty clearing continues, firms recognize the significant impacts to collateral management that will result. A CCP Collateral Working Group within the ISDA Collateral Steering Committee has been set up to ensure all collateral aspects of this market evolution are properly addressed. This group will assist in accomplishing the regulatory goal of extending clearing of OTC derivatives and will also help drive execution of recommendation MR-9 in the Market Review to promote adoption of common Straight-Through-Processing to CCPs.

**Market Initiative:** The CCP Collateral Working Group will continue to engage with clearing house operators and promote operational commonality in order to permit Straight-Through-Processing to be adopted by all entities that interact with the bilateral collateralization process (including central clearing houses).

## 7. ISDA Margin Survey

ISDA conducts various surveys to assess and analyze the usage and best practices in key areas of the OTC derivatives markets. The ISDA Margin Survey (Margin Survey) is conducted on an annual basis to examine the state of collateral use and management among derivatives dealers and end-users. The most recent version was published on April 14, 2011, covering the 2010 calendar year.

**Market Initiative:** The ISDA Margin Survey will be conducted at the end of 2011, with an anticipated publication in April 2012.

## 8. Recommendations for Regulators and Legislators

Through the Market Review and Independent Amount White Paper, several aspects of collateralization that could be improved through regulation and legislation were identified as well as areas that could be impacted by statutes and rule-makings. These are discussed in MR-2, MR-3, and IA-11; regulators and legislators are encouraged to take these recommendations under consideration. ISDA member firms will continue to provide significant resources to provide thoughtful responses to NPRs and build industry infrastructure in support of the new Rules as they are finalized.

**Market Initiative:** On an ongoing basis, ensure regulators and legislators are well informed to assist them in accomplishing the recommendations summarized below:

- Ensure netting and collateral provisions are enforceable in the event of insolvency, bankruptcy, etc. (MR-2)
- Ensure there is harmonization of policy and regulation to avoid regulatory and legislative arbitrage across jurisdictions and entity types. (MR-3)
- Review and amend statutes and rule-makings in applicable jurisdictions to ensure that derivatives collateral held by a non-defaulting secured party is not subject to stay, attachment or other enforcement delay in bankruptcy, and also that excess derivatives collateral held by a defaulting secured party is promptly returned to the pledgor. (IA-11)

**Table 1 - The Roadmap for Collateral Management**

| <i>Date</i>                    | <i>Commitment</i>  | <i>Status</i>                        |
|--------------------------------|--|--------------------------------------|
| Mar 31, 2009<br>Fed Commit.    | 1. Replace affixed USD 20mm tolerance with a risk-based reporting threshold for portfolio reconciliations. The new tolerance reduces the absolute dollar level for reporting of material valuation differences from USD 20mm per trade to USD 10mm per trade plus a deviation threshold by product.              | Completed                            |
| May 31, 2009<br>Fed Commit.    | 2. Implement the new risk-based threshold for reporting portfolio reconciliation valuation differences on May 31, 2009. The first report utilizing the new threshold will be available early July for the June report. The threshold will be reviewed (at least) annually and revised as necessary.              | Completed                            |
| May 31, 2009<br>Fed Commit.    | 3. Issue the Phase 1 draft Dispute Resolution proposal by the end of May, to be followed by a comment period of 3 weeks.   | Completed:<br>Published Jun-2-2009   |
| Jun 30, 2009<br>Fed Commit.    | 4. Reduce required portfolio size for weekly collateralized portfolio reconciliation from 5,000 trades to 500 trades amongst the OMG Dealers (See also Commitment 6 below)   | Completed                            |
| Jun 30, 2009<br>Fed Commit.    | 5. The OMG Dealers will upload collateralized portfolios to their respective matching services on a daily basis (See also Commitment 6 below)  | Completed                            |
| Jun 30, 2009<br>Fed Commit.    | 6. Execute daily collateralized portfolio reconciliations for collateralized portfolios in excess of 500 trades between OMG dealers. (This new Commitment replaces Commitments 4 and 5 above, which were less stringent)   | Completed                            |
| Jun 30, 2009<br>Fed Commit.    | 7. Publish a detailed paper on both the buy- and sell-side views of the Segregated Initial Margin issue to the ISDA Collateral Committee, MFA and SIFMA  | Completed:<br>Published Oct-22-2009  |
| Jun 30, 2009<br>Fed Commit.    | 8. Issue the Phase 2 draft Dispute Resolution proposal by the end of June, to be followed by a comment period <i>to be determined</i> over the summer  | Completed:<br>Published July-15-2009 |
| Sep 30, 2009<br>Fed Commit.    | 9. The ISDA Collateral Committee will work with the broader ISDA, MFA, and SIFMA communities to produce a set of options for industry consideration that will address the Segregated Initial Margin issue by September 30, 2009. The options will include pros, cons, and pre-conditions for each stated option. | Completed:<br>Published Mar-1-2010   |
| Oct 31, 2009<br>Fed Commit.    | 10. Publish a feasibility study to identify infrastructure and other dependencies for wider portfolio reconciliation rollout across OTC participants   | Completed:<br>Published Dec-18-2009  |
| Oct 31, 2009<br>Fed Commit.    | 11. Publish for public comment a first draft of the proposal for a defined sequence of messages to be exchanged electronically for Margin call, Interest Payment and Collateral Substitution by July 31 2009, with a final version to be published by October 2009.  | Completed:<br>Published Nov-12-2009  |
| Dec 31, 2009<br>Fed Commit.    | 12. Publishing key operational standards in Portfolio Reconciliation by December 2009 which will be included in the final Best Practices document mentioned  | Completed:<br>Published Feb-10-2010  |
| Mar 1, 2010<br>Mkt Initiative  | 13. Publish the Market Review of Bilateral Collateralization Practices   | Completed:<br>Published Mar-1-2010   |
| Apr 15, 2010<br>Mkt Initiative | 14. Publish the Portfolio Reconciliation Implementation Plan (based on the Portfolio Reconciliation Feasibility Study)   | Completed:<br>Published Apr-15-2010  |
| Apr 15, 2010<br>Fed Commit.    | 15. Update the Roadmap for Collateral Management based on the recommendations from the Independent Amount white paper and the Market Review of Collateralization   | Completed:<br>Published Apr-15-2010  |
| Apr 15, 2010<br>Fed Commit.    | 16. Establish the template for the monthly reporting of disputed collateral and exposure amounts   | Completed                            |
| Apr 30, 2010<br>Fed Commit.    | 17. If any are identified, a list of changes to the CSA will be collated and any recommendations will be brought to ISDA Legal and Documentation groups  | Open from June 2009 Roadmap          |



| <i>Date</i>                         | <i>Commitment</i>   | <i>Status</i>  |
|-------------------------------------|---|--|
| May 31, 2010<br>Fed Commit.         | 18. Start submitting the monthly reporting of disputed collateral and exposure amounts to supervisors   | Completed  |
| May 31, 2010<br>Mkt Initiative      | 19. Establish a working group by May 31, 2010 consisting of ISDA, SIFMA, MFA, and market participants (including custodians) to develop standard provisions that may be incorporated into documents for Third Party Custodian and Tri-Party Collateral Agent IA holding arrangements in order to facilitate negotiation and consistency of operation for participants who elect to use such arrangements. Consideration should be given to applying these standard provisions to the holding of IA by Dealer Affiliates also, where applicable.     | Completed  |
| Jun 30, 2010<br>Fed Commit.         | 20. Publish a "Best Practices" document for Collateral management and incorporate the appropriate MR recommendations into the Best Practices for Collateral Management document due June 30, 2010. Specifically this includes MR-7 and MR-8 related to providing parties with portfolio reconciliation files and usage of portfolio reconciliation valuation data.  | Completed; from June 2009 Roadmap & Expanded in April 2010 Roadmap |
| Jun 30, 2010<br>Fed Commit.         | 21. Start monthly unilateral portfolio reconciliation with OTC Counterparties comprising more than 1,000 trades   | Completed  |
| Jul 31, 2010<br>Fed Commit.         | 22. Expand the monthly regulatory portfolio reconciliation reports to reflect performance of new commitment   | Completed  |
| Sep 30, 2010<br>Fed Commit.         | 23. Complete the testing and refinement of the Dispute Resolution Procedure   | Open from March 1 2010 Letter                                      |
| Post Oct 31, 2010<br>Mkt Initiative | 24. Subject to the Cross Asset Class Working Group publishing their findings by August 2010, the G14 Members will establish a timeline for adoption of the Collateralized Portfolio Reconciliation Best Practices and Minimum Market Standards that will provide for adoption no later than 2011.   | Completed  |
| Nov 30, 2010<br>Mkt Initiative      | 25. ISDA will investigate whether the treatment of consent to a substitution request can be standardized between the English CSA and the New York CSA. ISDA will also determine whether a template English CSA or New York CSA should be developed that treats substitution requests as non-consensual which could be used for new collateral agreements or existing agreements that are subject to re-negotiation. The review and analysis will be completed by [November 30, 2010] with further dates for making the improvements if appropriate. | Open from April 2010 Roadmap                                       |
| Dec 31, 2010<br>Mkt Initiative      | 26. Continue to work with vendors and the industry to develop fully interoperable standardized electronic communication for margin calls. The G14 will start piloting standardized electronic communication for key collateral processes with their chosen vendor(s) or utilities by December 31, 2010 contingent on the availability of a commercially viable solution. Firms will work with vendors to actively promote full interoperability of all solutions.   | Completed  |
| Dec 31, 2010<br>Mkt Initiative      | 27. Complete a detailed review of the Phase I Portfolio Reconciliation implementation plan by December 31, 2010 with a view to use the results to define the targets for Phase II which will comprise further expansion of processing collateralized portfolio reconciliation. Phase II will be implemented as part of the industry agenda for 2011.  | Completed  |
| Jan 31, 2011<br>Mkt Initiative      | 28. ISDA will develop a standard form of amendment agreement that permits the parties to a New York Law CSA to accommodate treatment of segregated IA as a separate pool of collateral by January 31, 2011.   | Open from April 2010 Roadmap                                       |
| Ongoing<br>Mkt Initiative           | 29. The Collateral CCP Working Group will continue to engage with clearing house operators and promote operational commonality in order to permit Straight-Through-Processing to be adopted by all entities that interact with the bilateral collateralization process (including central clearing houses).   | Open from April 2010 Roadmap                                       |

| <i>Date</i>                  | <i>Commitment</i>  | <i>Status</i>                |
|------------------------------|--|------------------------------|
| Ongoing<br>Mkt Initiative    | 30. On an ongoing basis, ensure regulators and legislators are well informed of potential impacts and recommended changes as set out in the following three recommendations, briefly summarized here: <ul style="list-style-type: none"> <li>- Ensure netting and collateral provisions are enforceable in the event of insolvency, bankruptcy, etc. (MR-2)</li> <li>- Ensure there is harmonization of policy and regulation to avoid regulatory and legislative arbitrage across jurisdictions and entity types. (MR-3)</li> <li>- Review and amend statutes and rule-makings in applicable jurisdictions to ensure that derivatives collateral held by a non-defaulting secured party is not subject to stay, attachment or other enforcement delay in bankruptcy, and also that excess derivatives collateral held by a defaulting secured party is promptly returned to the pledgor. (IA-11)</li> </ul> | Open from April 2010 Roadmap |
| Mar 31, 2011<br>Fed Commit.  | 31. Amend the threshold of G14 dispute reporting from disputes over \$20mm and 15 days to disputes over \$15mm and 15 days for reports starting in April 2011.   | New from March 2011 Letter   |
| Apr 7, 2011<br>Fed Commit.   | 32. Release a revised draft of the ISDA 2011 Convention on Portfolio Reconciliation and the Investigation of Disputed Margin Calls (the "Convention").   | Completed                    |
| Apr 26, 2011<br>Fed Commit.  | 33. Release a revised draft of the ISDA 2011 Formal Market Polling Procedure (the "MPP")   | Completed                    |
| May 4, 2011<br>Fed Commit.   | 34. Begin to trial the Convention and MPP for a three month period, ending July 29, 2011 between G14 Members and other interested market participants on a bilateral basis.  | New from March 2011 Letter   |
| May 31, 2011<br>Fed Commit.  | 35. Enhance G14 <sup>3</sup> reports to include disputes both where the reporting entity is calling for collateral and being disputed, and where such reporting entity is being called for collateral and disputing. G14 Members will report on the number of disputes that are taken through a polling process during the previous month.   | New from March 2011 Letter   |
| June 30, 2011<br>Fed Commit. | 36. Investigate the feasibility of achieving a consolidated, anonymized report of large disputes across industry participants.   | New from March 2011 Letter   |
| June 30, 2011<br>Fed Commit. | 37. Reduce the threshold for routine portfolio reconciliation of collateralized portfolios from those exceeding 1,000 transactions to those exceeding 500 transactions; these portfolios will be reconciled at least monthly.  | New from March 2011 Letter   |
| June 30, 2011<br>Fed Commit. | 38. Update the Collateral Roadmap  | New from March 2011 Letter   |
| Sep 9, 2011<br>Fed Commit.   | 39. Publish a revised draft of the ISDA Dispute Resolution Documents reflecting lessons learned in the trial period  | New from March 2011 Letter   |
| Sep 9, 2011<br>Fed Commit.   | 40. Release a phased implementation plan for industry adoption of the revised Dispute Resolution Documents   | New from March 2011 Letter   |
| Nov 30, 2011<br>Fed Commit.  | 41. Update the Best Practices for the OTC Derivatives Collateral Process (BP) document published in June 2010  | New from March 2011 Letter   |

**Table 2 - Summary of Recommendations for Collateralization Practices**

| <i>Market Review Recommendations</i>   | <i>Response</i>   |
|--|---|
| <b>MR - 1:</b> Subject to relevant capital standards and supervisory oversight (where applicable) parties <sup>4</sup> active in the bilateral OTC derivative markets should have the responsibility and the authority to make decisions regarding the credit risk they assume, including the potential use of credit risk mitigation measures such as collateralization, insurance or other credit enhancement techniques. (For a related Recommendation see also IA-9)   | No further centrally coordinated action is required - Firms should consider as part of their policy and market practice |
| <b>MR - 2:</b> National, Regional, and State legislative bodies should review applicable laws within their jurisdiction and take steps to ensure that netting and collateral provisions, (including those relating to security interests), typically used in the bilateral OTC derivative market are promptly enforceable in the event of insolvency, bankruptcy, administration, conservatorship and other similar proceedings affecting all market participants. <sup>5</sup>  | See Roadmap item 7: Work with regulators and legislators  |
| <b>MR - 3:</b> Consideration should be given to ensure there is harmonization of policy and regulation to avoid regulatory and legislative arbitrage across jurisdictions and entity types <sup>6</sup> .  | See Roadmap item 7: Work with regulators and legislators  |
| <b>MR - 4:</b> ISDA, SIFMA, MFA, and market participants should work together to develop standard provisions that may be incorporated into documents for Third Party Custodian and Tri-Party Collateral Agent IA holding arrangements. (See IA-12 for the full Recommendation)   | See IA-12   |
| <b>MR - 5:</b> ISDA should continue the drive towards standardization of format and electronic communication of margin calls in the market, coordinating across market participant firms and vendors who should create fully interoperable solutions that improve market efficiency and reduce systemic risk.  | Completed   |
| <b>MR - 6:</b> The requirement to receive consent ahead of agreeing to a substitution differs dependant on the choice of ISDA Credit Support Document and the terms of the particular document. ISDA should investigate whether the treatment of consent can be standardized between the English CSA and the New York CSA and determine whether a template English CSA or New York CSA can be developed that treats substitution requests as non-consensual (for new collateral agreements or existing agreements that are subject to re-negotiation).   | See Roadmap item 4: Conduct legal review and analysis on current documentation and identify improvement opportunities   |
| <b>MR - 7:</b> A party receiving a reasonable request from their counterparty to provide their view of portfolio content and valuation in order to facilitate a portfolio reconciliation for the purpose of the collateralization process or resolution of a margin dispute should provide the requested data on a timely basis, according to the relevant documentation and consistent with the ISDA Portfolio Reconciliation Best Practices and Minimum Market Standards papers.   | Completed as part of Best Practices   |
| <b>MR - 8:</b> A party in receipt of portfolio content and valuation details from its counterparty to facilitate the collateralization process or resolution of a margin dispute should take commercially reasonable measures so that its sales and trading personnel do not have access in the ordinary course of business to trade details or valuations, except for the purpose of margin dispute resolution, investigation of portfolio differences and similar issue-driven situations, and then only to the limited extent necessary in the circumstances <sup>7</sup> .   | Completed as part of Best Practices   |
| <b>MR - 9:</b> In order to promote market efficiency and to reduce systemic risk through standardization, ISDA should nominate a Working Group to develop in partnership with clearing house operators a set of guiding principles and practical recommendations for common Straight Through Processing to be adopted by all entities that interact with the bilateral collateralization process (including central clearing houses).  | See Roadmap item 6: Existing Collateral CCP working group will work with CCPs to promote.                               |
| <b>MR - 10:</b> The use of credit-based Thresholds that reduce as credit ratings decline or credit spreads widen should be carefully considered. Parties that elect to use these elements in collateral arrangements should recognize that they may have a ratcheting effect that reduces credit risk to one party while simultaneously increasing liquidity demands on the other party if the latter suffers credit deterioration. Accordingly, both parties should ensure that they have in place appropriate monitoring to (a) detect and respond to credit deterioration in their counterparty and (b) forecast and manage the liquidity impact of their own credit deterioration. Alternatively, the use of fixed thresholds and/or frequent margin calls should also be considered, and all collateral structures should be considered in the context of guarantees and other credit risk mitigants that may be available. | No further centrally coordinated action is required - Firms should consider as part of their policy and market practice |

| <i>Market Review Recommendations</i>   | <i>Response</i>   |
|--|---|
| <b>MR - 11:</b> Firms should consider the quality and liquidity of collateral when including assets as eligible collateral for each credit support arrangement. In particular, in the case of new collateral agreements and as existing agreements are subject to substantial re-negotiation, for non-cash collateral firms should perform analysis and apply appropriate haircuts and concentration limits such that post-liquidation proceeds of collateral will likely be sufficient to cover expected credit exposure and can be realized in a reasonable period even in distressed market conditions. | No further centrally coordinated action is required - Firms should consider as part of their policy and market practice |
| <b>MR - 12:</b> All parties should, subject to local law requirements, continue to be able to hold collateral to cover Variation Margin (VM) free of any segregation requirement, restriction on rehypothecation or other limitation. (See IA-8 for the full Recommendation)   | See IA-8  |

| <i>Independent Amount White Paper Recommendations</i>  | <i>Status</i>   |
|--|---|
| <b>IA - 1:</b> Collateral taken under title transfer forms of collateral agreement should not be segregated or have any similar limitation on the receiving party's ability to freely use the collateral, for it is legally the receiving party's own property.  | No further centrally coordinated action is required - Firms should consider as part of their policy and market practice |
| <b>IA - 2:</b> Collateral that is intended to be segregated should be governed by a security interest form of collateral agreement. Parties may consider utilizing hybrid title transfer / security interest documentation arrangements. Parties may wish to research legal issues associated with the operation and enforcement of hybrid arrangements.   | No further centrally coordinated action is required - Firms should consider as part of their policy and market practice |
| <b>IA - 3:</b> Unless otherwise required by law or regulation, unrestricted Direct Dealer Holding of IA should continue to be an available option between a pair of counterparties that are willing to accept the risks associated with such a holding arrangement. Dealers should consider the optional use of a risk disclosure statement (see example at Annex B) for certain counterparties <sup>8</sup> . | No further centrally coordinated action is required - Firms should consider as part of their policy and market practice |

| Independent Amount White Paper Recommendations   | Status   |
|--|--|
| <p><b>IA - 4:</b> Unless otherwise required by law or regulation, both Dealers and End Users should consider a range of alternative holding arrangements for IA that include features designed to manage for both parties the risks and benefits associated with IA. Legal advice in respect of the risks and benefits of the various structures in the relevant jurisdictions is highly recommended. These may include, but are not limited to, the IA holding arrangements described below. When negotiating a CSA, the counterparties should mutually agree the particular IA holding structure in accordance with IA-9 below.</p> <p><u>Non-Exclusive List of Alternative Security Interest IA Holding Arrangements</u></p> <ul style="list-style-type: none"> <li>▪ Segregated Direct Dealer Holding of IA<sup>9</sup> <ul style="list-style-type: none"> <li>- IA is delivered by the End User directly to the Dealer. The Dealer is required to segregate the IA from their own assets and those of unconnected third parties on their books and records. The dealer is not permitted to rehypothecate the IA. The Dealer may invest cash or lend securities as contractually agreed for the benefit of the End User.</li> </ul> </li> <li>▪ Segregated Dealer Affiliate<sup>10</sup> Holding of IA<sup>11</sup> <ul style="list-style-type: none"> <li>- IA is delivered by the End User to an Affiliate of the Dealer, and held pursuant to a contract between the Dealer and its Affiliate. The Dealer and the Affiliate are both required to segregate the IA from their own assets and those of unconnected third parties on their books and records. The Dealer and the Affiliate are not permitted to rehypothecate the IA. The Dealer may invest cash or lend securities as contractually agreed for the benefit of the End User.</li> </ul> </li> <li>▪ Third Party<sup>12</sup> Custodian of Dealer Holding of IA<sup>13</sup> <ul style="list-style-type: none"> <li>- IA is delivered by the End User to a Third Party Custodian that is appointed by and subject to a bilateral contract with the Dealer. The Dealer may not hold IA directly, but instead the Third Party Custodian holds the IA in an account that indicates the ownership interest of the End User and the security interest of the Dealer in all of the assets in the account. The Third Party Custodian is required to segregate the IA from its own assets and those of unconnected third parties on its books and records. The Dealer and the Third Party Custodian are not permitted to rehypothecate the IA. The Dealer and the Third Party Custodian may invest cash or lend securities as contractually agreed for the benefit of the End User.<sup>14</sup></li> </ul> </li> <li>▪ Tri-Party Collateral Agent Holding of IA<sup>15</sup> <ul style="list-style-type: none"> <li>- IA is delivered by the End User to a Tri-Party Collateral Agent that is under contract to the Dealer and the End User jointly<sup>16</sup>. The Tri-Party Collateral Agent will hold the IA in an account in the name of the End User, with a security interest granted to the Dealer in respect of the assets in such account<sup>17</sup>. The Tri-Party Collateral Agent is required to segregate the IA from its own assets and those of unconnected third parties on its books and records. The Dealer and the Tri-Party Collateral Agent are not permitted to rehypothecate the IA. The Dealer and the Tri-Party Collateral Agent may invest cash or lend securities as contractually agreed for the benefit of the End User.</li> </ul> </li> </ul> | <p>No further centrally coordinated action is required - Firms should consider as part of their policy and market practice</p> |
| <p><b>IA - 5:</b> ISDA should develop a standard provisions that permits the parties to a New York Law CSA to accommodate treatment of segregated IA as a separate pool of collateral. These provisions could facilitate either (i) IA and VM collateral pools are delivered separately, with two separate cash flows and no netting; or (ii) IA and VM are netted (see Annex D). This should be a point of negotiation between contracting parties.</p>   | <p>See Roadmap item 4: Conduct legal review and analysis on current documentation and identify improvement opportunities</p>   |
| <p><b>IA - 6:</b> As sufficient industry experience and feedback on the foregoing proposals emerges over time, ISDA should consider updating its range of collateral legal opinions to take account of the above documentation changes.</p>  | <p>No further centrally coordinated action is required - Firms should consider as part of their policy and market practice</p> |
| <p><b>IA - 7:</b> Parties should consider who should bear the risk of loss in the event of the insolvency of an independent Tri-Party Collateral Agent, and ensure that this responsibility is clearly documented between them.</p>  | <p>No further centrally coordinated action is required - Firms should consider as part of their policy and market practice</p> |

| <i>Independent Amount White Paper Recommendations</i>  | <i>Status</i>   |
|--|---|
| <p><b>IA - 8:</b> All parties should, subject to local law requirements, continue to be able to hold collateral to cover VM free of any segregation requirement, restriction on rehypothecation or other limitation<sup>18</sup>. When using the English Credit Support Deed, parties should consider whether the arrangement constitutes a "security financial collateral arrangement" and, if so, whether it is preferable to amend the Deed to permit rehypothecation and remove the requirement to segregate or whether the English Credit Support Annex should be used for VM. (This Recommendation is referenced in MR-12)</p> | <p>No further centrally coordinated action is required - Firms should consider as part of their policy and market practice</p>                |
| <p><b>IA - 9:</b> Unless otherwise required by law or regulation, the parties to an OTC derivative contract should be free to contract bilaterally for the IA approach that best suits the facts and circumstances that exist between them. (For a related Recommendation see also MR-1)</p>   | <p>No further centrally coordinated action is required - Firms should consider as part of their policy and market practice</p>                |
| <p><b>IA - 10:</b> End Users and Dealers contemplating collateral agreements containing IA terms should each evaluate carefully the risks, costs, limitations and risk mitigation effectiveness of the proposed IA holding structure, taking such legal or other professional advice as they consider appropriate. A party should not enter into a collateral agreement that they consider to be unsuitable for themselves.</p>  | <p>No further centrally coordinated action is required - Firms should consider as part of their policy and market practice</p>                |
| <p><b>IA - 11:</b> In those jurisdictions where there exist concerns, national legislators and financial supervisors<sup>19</sup> should amend statutes and rule-makings to ensure that derivatives collateral held by a non-defaulting secured party is not subject to stay, attachment or other enforcement delay in bankruptcy, and also that excess derivatives collateral held by a defaulting secured party is promptly returned to the pledgor. We note that such an initiative took place in Europe by virtue of the European Financial Collateral Directive.</p>  | <p>See Roadmap item 7: Work with regulators and legislators</p>   |
| <p><b>IA - 12:</b> ISDA, MFA, and market participants<sup>20</sup> should expeditiously work together to develop standard provisions that may be incorporated into documents for Third Party Custodian and Tri-Party Collateral Agent IA holding arrangements. Consideration should be given to applying these standard provisions to the holding of IA by Dealer Affiliates also, where applicable. (This Recommendation is referenced in MR-4)</p>   | <p>See Roadmap item 5: A working group has been formed to develop standard provisions for use of third parties in IA holding arrangements</p> |

| <i>Portfolio Reconciliation Recommendations</i>   | <i>Status</i>    |
|---|------------------|
| <p><b>PR - 1:</b> OTC derivative market participants should adopt the Collateralized Portfolio Reconciliation Best Practices (published February 10, 2010).</p>   | <p>Completed</p> |
| <p><b>PR - 2:</b> OTC derivative market participants should adopt the Minimum Market Standards for Collateralized Portfolio Reconciliation (published February 10, 2010).</p>   | <p>Completed</p> |
| <p><b>PR - 3:</b> ISDA should commission an Implementation Plan to develop a graduated approach to wider market adoption of Portfolio Integrity Assurance measures. It is recommended that the plan should be developed by February 28, 2010 and should address:</p> <ul style="list-style-type: none"> <li>▪ Adoption of a regular portfolio reconciliation discipline for actively traded portfolios with counterparties trading OTC derivatives as principal, for hedging and for investment purposes. This is principally directed to the Major Broker Dealers<sup>21</sup>, Other Banks and Buy-Side firms.</li> <li>▪ Adoption of a periodic portfolio reconciliation discipline for counterparties with less actively traded portfolios, principally directed to End-Users.</li> <li>▪ Exclusion of small size portfolios where there is infrequent trading activity from the requirements of formal portfolio reconciliation. This is principally directed towards End-Users. For these portfolios, annual provision of a position and valuation statement by the dealer firm, which enables the counterparty to verify the portfolio population may be a more appropriate approach.</li> </ul> | <p>Completed</p> |



## End notes for Table 2. Summary of Recommendations for Collateralization Practices

<sup>1</sup> MR refers to the Collateral Market Review, IA refers to the Independent Amount whitepaper and PR refers to the Portfolio Reconciliation Best Practices.

<sup>2</sup> 70% of G14 Member firms will implement these enhancements by May 31, 2011 and the remainder no later than December 30, 2011. Firms that cannot meet the May 31 date will inform their prudential regulator.

<sup>3</sup> 70% of G14 Member firms will implement these enhancements by May 31, 2011 and the remainder no later than December 30, 2011. Firms that cannot meet the May 31 date will inform their prudential regulator.

<sup>4</sup> This includes counterparties of all types, including but not limited to banks, broker-dealers, corporates, investment funds (both regulated and non-regulated), private individuals, supranationals, sovereigns, national debt offices and central banks.

<sup>5</sup> ISDA has been promoting law reform in relation to close-out netting almost since the year of its foundation in 1985 and during that time has been involved in dozens of national initiatives to strengthen close-out netting, and many national statutes have been wholly or partly based on, or at least influenced by ISDA's Model Netting Act (the third and most recent version of ISDA's Model Netting Act was published in 2006 and is available from [www.isda.org](http://www.isda.org)). In this context please also note the efforts of industry (most notably by ISDA and the European Financial Markets Lawyers Group) to promote a European Union Directive on close-out netting. ISDA continues to monitor and, where appropriate, actively promote national law reform developments in relation to netting and financial collateral, most recently in China, Russia, Kazakhstan, the Ukraine, Poland, the Czech Republic, Slovakia, Slovenia, Romania, Croatia, Serbia, Pakistan, the UAE, Bahrain, Qatar, Colombia, Peru, South Africa, Mauritius, Nigeria, South Korea, Indonesia and Malaysia. In addition, it has been monitoring recent and current post-financial crisis legislation with potential to affect current protections for netting and financial collateral in a number of other countries, including the USA, Canada, the United Kingdom, Germany, Ireland, Denmark, Iceland, Switzerland, Hungary and South Africa.

<sup>6</sup> For example, the UK FSA's position on what collateral types constitute liquid collateral in its policy document titled "Strengthening Liquidity Standards" is significantly stronger than other regulators ([www.fsa.gov.uk/pages/Library/Policy/Policy/2009/09\\_16.shtml](http://www.fsa.gov.uk/pages/Library/Policy/Policy/2009/09_16.shtml))

<sup>7</sup> Such procedures may create an unequal playing field, in that it is likely that larger firms, due to their size and greater degree of regulatory scrutiny, are perhaps more likely to have robust procedures in place than other entity types. In implementing this recommendation the market should consider how a consistent treatment can be assured.

<sup>8</sup> Dealers should apply their own risk management judgment in deciding which parties, if any, should receive such risk disclosures. The OTC derivative market is a sophisticated market for complex products oriented towards professional investors and risk managers who are expected to understand the risks for such products, including the risks associated with IA.

<sup>9</sup> In this structure there is no third party involved, however traceability of collateral is established by proper segregation on the books and records of the Dealer, in practice backed up by provision of relevant account numbers, statements and other documentation to the End User that would assist in evidencing the status of the assets back to the fungible pool of like securities and not necessarily the specific security originally pledged\*. The Dealer has no rights of rehypothecation, except in the limited sense of any arrangement that may be contractually agreed with the End User by which cash may be swept into investment vehicles, or securities may be lent through a securities lending or repo arrangement. In the event of enforcement of the secured party's rights against the collateral, the Dealer has full possession and control of the assets and can seize and liquidate them. (\*This is a technical point that goes to the fundamentals of how securities are held in dematerialized book entry form. Although a complete discussion of this issue is out of scope for this paper, the essential point is that all similar securities eventually trace back to a master record on some defined repository where the book entries are maintained. Often there will be multiple layers of custodial holding structure for securities, each with their own books and records but in turn aggregating to higher levels until the ultimate depository record is reached. In the situation of trying to trace assets caught in an insolvency, if the particular assets are unique at the level of the relevant layer in the holding structure then it may be possible to identify those securities explicitly. However, if there are several examples of holdings of similar securities at that relevant layer, then one holding may be indistinguishable from other holdings. Hence traceability in this scenario extends only as far as the pool of similar securities. If the sum of all claims on that pool is equalled by the pool size, then this distinction between specific security and the pool of similar securities may be academic; however if the pool contains fewer than the total claims, then typically each claim will be for a pro rata share of the pool of similar securities. Not only is this a technical and esoteric area of the securities market, but it is also a complex area of bankruptcy law and laws may differ across jurisdictions - market participants are advised to seek qualified professional advice on such matters.)

<sup>10</sup> "Affiliate" means an entity that for the purposes of the accounting standards applicable to the Dealer would be considered to be an affiliate company of the Dealer.

<sup>11</sup> In this structure a third party is involved, but it is an Affiliate of the Dealer. The Affiliate may conduct business at arm's length from the Dealer and may be subject to a different regulatory regime (for example, in the United States the Dealer booking derivative trades and calling collateral may be a bank entity but it may contract its broker-dealer Affiliate to operate as custodian for the collateral assets). Even though the third party is affiliated to the Dealer, in the particular facts and circumstances there may be sufficient separation between the two as to provide comfort that upon the insolvency of the Dealer then (a) the insolvency of the Affiliate is not automatic and (b) if the Affiliate were also insolvent, then the statutory protections and liquidation regime applying to the Affiliate would provide an adequate measure of protection to the End User. Traceability of collateral is established by proper segregation on the books and records of the Dealer and the Affiliate, in practice backed up by provision of relevant account numbers, statements and other documentation to the End User that would assist in evidencing the status of the assets back to the fungible pool of like securities and not necessarily the specific security originally pledged\*. The Dealer and the Affiliate have no rights of rehypothecation, for their own benefit, although they may act in accordance with any arrangement that may be contractually agreed with the End User by which cash may be swept into investment vehicles, or securities may be lent through a securities lending or repo arrangement for the benefit of the End User. In the event of enforcement of the secured party's rights against the collateral, the Dealer has contractual and practical control over the Affiliate and thus can obtain possession of the assets on request and can then seize and liquidate them. (\* See also Note 24)

<sup>12</sup> "Third Party" means an entity that is not an Affiliate of either the End User or the Dealer principals to a transaction under the applicable accounting standards for each entity concerned.

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<sup>13</sup> In this structure a Third Party is involved, but under contract to the Dealer - there is no privity of contract between the Custodian and the End User. Traceability of collateral is established by proper segregation on the books and records of the Dealer and also on the books and records of the Custodian. These measures are in practice backed up by provision of relevant account numbers, statements and other documentation to the End User that would assist in evidencing the status of the assets back to the fungible pool of like securities and not necessarily the specific security originally pledged\*. The Dealer has no rights of rehypothecation, for their own benefit, although they may act in accordance with any arrangement that may be contractually agreed with the End User by which cash may be swept into investment vehicles, or securities may be lent through a securities lending or repo arrangement for the benefit of the End User. The Custodian has very limited rights with respect to the collateral, essentially only in the event of non-payment of fees and in some cases in respect of advances made by the custodian in anticipation of incoming but as-yet unsettled excess collateral; for example, advances in respect of distributions on the collateral (e.g. principal and interest or redemption payments on money-market fund interests) made in advance of the actual final physical settlement of such distributions. In the event of enforcement of the secured party's rights against the collateral, the Dealer has contractual control over the Custodian and therefore can obtain possession of the assets on request and can then seize and liquidate them. (\* See also Note 24)

<sup>14</sup> Correspondingly, End User could appoint a Custodian, subject to a bilateral contract with the End User, to hold IA and indicate the Dealer's interest in the account maintained by such Custodian.

<sup>15</sup> In this structure a Third Party is involved, under a three-way contract with the Dealer and the End User. Traceability of collateral is established by proper segregation on the books and records of the Dealer and also on the books and records of the Tri-Party Collateral Agent. These measures are in practice backed up by provision of relevant account numbers, statements and other documentation to the End User that would assist in evidencing the status of the assets back to the fungible pool of like securities and not necessarily the specific security originally pledged\*. The Dealer has no rights of rehypothecation, for their own benefit, although they may act in accordance with any arrangement that may be contractually agreed with the End User by which cash may be swept into investment vehicles, or securities may be lent through a securities lending or repo arrangement for the benefit of the End User. The Tri-Party Collateral Agent has very limited rights with respect to the collateral, essentially only in the event of non-payment of fees and in some cases in respect of advances made by the custodian in anticipation of incoming but as-yet unsettled excess collateral. In the event of enforcement of the secured party's rights against the collateral, the Dealer typically must issue a notice of exclusive control to the Tri-Party Collateral Agent, who is then contractually required to turn over possession of the assets to the Dealer, who can then liquidate them. (\* See also Note 24)

<sup>16</sup> Parties should consult with their legal advisors and any other advisors if they intend to use this structure in order to ensure that a valid security interest is created and negotiate the specified conditions, if any, applicable to the exercise of "control" in order to create a valid security interest.

<sup>17</sup> The account may either be in the name of the Dealer or in the name of the End User, depending on the position agreed between the parties. This example assumes that the account is in the name of the End User.

<sup>18</sup> Where one of the parties to a collateral agreement is a mutual fund subject to the Investment Company Act of 1940, then the parties may be required to make special holding arrangements for all collateral, including VM, sometimes called "Assets Held Away". Typically in such circumstances the collateral remains at a custodian under contract to the mutual fund, and the dealer takes a security interest over certain assets. This is a complex and specialized area and beyond the scope of this paper to describe in detail. It is not intended that any of the recommendations in this paper should upset the current arrangement in this specialized segment of the market. Market participants are referred to SIFMA as the authority on this topic.

<sup>19</sup> It is important that any such reforms to create greater certainty should extend beyond the core bank and broker-dealer areas of the financial markets, and in particular cover entities subject to special regulation such as state-regulated insurance companies in the United States and more broadly public utilities, railroads other special classes.

<sup>20</sup> Dealers, End Users, Custodians, Tri-Party Collateral Agents, Depository operators and others as necessary.

<sup>21</sup> Portfolios between the Major Broker Dealers are already subject to daily portfolio reconciliation. This recommendation is focused on portfolios between derivative dealers (Fed 15 Dealer and Other Banks) and Buy-Side firms, where stronger harmonization of market practice and reconciliation frequency may be helpful. It is unlikely that portfolio reconciliations between these classes of entities should be as frequent as the daily standard in place for the large, complex, high volume portfolios between the Major Broker Dealers, but the recommended Implementation Plan would identify specifics.