Task Force on Tri-Party Repo Infrastructure

Payments Risk Committee

Progress Report
July 6, 2011

The Task Force on Tri-Party Repo Infrastructure was formed in September 2009 under the auspices of the Payments Risk Committee, a private sector body sponsored by the Federal Reserve Bank of New York. The Task Force membership includes representatives from multiple types of market participants that participate in the tri-party repo market, as well as relevant industry associations. Federal Reserve and SEC staff participated in meetings of the Task Force as observers and technical advisors.

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Section 1: Summary and Introductions

The Tri-Party Repo Task Force issued recommendations in May 2010 to reduce the potential for systemic risk in the tri-party repo market[1]. Since that time, the Task Force has continued to meet to secure effective implementation of these recommendations, in particular those relating to changes in operational arrangements and the reduction of intraday credit provided by the Clearing Banks. This Progress Report provides an update on the status of the Task Force's recommendations.

Major changes in the operational arrangements associated with the tri-party repo market are set to occur imminently and over the course of 2011. These changes are largely on track with the schedule called for in the Task Force's recommendations.

Immediate action is required of tri-party repo market participants to ensure they are fully prepared for these changes. Failure to prepare for these changes will result in an inability to access the tri-party market after August 2011

The key purpose of this Progress Report is to articulate the nature of the changes planned for 2011 so that all market participants can understand how they may be impacted and how to plan accordingly.

In order to continue to participate in the tri-party repo market after August 29, 2011, market participants must, in the short-term, prepare for the introduction of 3-way trade confirmation and auto-substitution, including executing revised legal documentation reflecting these changes. **These steps are crucial to being able to continue participating in the tri-party repo market after August 29, 2011.**

The changes to operational arrangements occurring in 2011 provide a necessary foundation for achieving the Task Force's objective of the "practical elimination" of intraday credit by Clearing Banks. However, these changes alone do not fully eliminate the need for the daily unwind or the associated extensions of intraday credit by the Clearing Banks.

The Task Force reiterates that its key end-state objective is the practical elimination of intraday credit. Originally, the Task Force had hoped to achieve this objective in 2011, along the lines outlined in the documents released by its Operational Arrangements Workstream at the end of 2010[2]. Based on a thorough review, the Task Force has concluded that it is not possible to streamline the current settlement process sufficiently to position all cash and collateral to execute a simultaneous "unwind and rewind" of maturing and new trades early enough in the afternoon to be workable for market participants.

Accordingly, in order to achieve the end-state objective, the Task Force is now actively exploring approaches that entail a more substantial re-engineering of tri-party repo settlement mechanisms, including the potential adoption of multiple batch or real-time settlement approaches. In addition, the Clearing Banks have committed to significant further automation and enhancement of collateral allocation routines and algorithms, which will provide important support for such approaches.

The Task Force committed to the Federal Reserve Bank of New York that it will complete a revised plan for achieving its end-state objectives, including a detailed timetable, by mid- September 2011. This plan will be posted to the Task Force's website at that time. It bears emphasizing that the 2011 operational changes, including 3-way trade confirmation, auto-substitution, and afternoon settlement, are critical prerequisites for the end-state improvements that the Task Force will articulate later this year.

[1] See http://www.newyorkfed.org/prc/report_100517.pdf
[2] See http://newyorkfed.org/tripartyrepo/pdf/tpr_proposal_101203.pdf

In addition to changes in operational arrangements, the Task Force had identified in the May 2010 report several other changes to further improve efficiency and promote the stability of the Tri-party Repo market during times of stress. Sections 3-6 provide an update on these recommendations concerning valuations, transparency and contingency planning.

Highlights of Key Activities

- Operational Enhancements: The Operational Workstream established by the Task Force under the joint leadership of Mark Trivedi (JPMC) and John Morik (BNYM) has further defined and clarified the changes in operational arrangements needed. The Task Force released a series of recommendations for comment in December 2010[3] and the Operational Workstream has continued to develop the requirements. Recent milestones include:
    - Both Clearing Banks have introduced auto substitution functionality into their daily production processes and many Dealers have started utilizing the functionality. All Dealers fully utilizing the tool as of end June 2011.
    - As of April 18, 2011, both Clearing Banks implemented support for three-way trade confirmation. Client conversions to be complete before August 29, 2011 and roll-out of the online affirmation tool is currently underway.
    - In the June 9, 2011 press release, the Tri-Party Repo Task Force announced that **by August 29, 2011, all tri-party repo transactions must be confirmed by all parties to the trade otherwise they will be rejected**[4].
    - In order to help ensure that all impacted market participants are aware of these changes, a communication document from Dealers to Cash Investors relating to timelines and requirements was published on the Tri-Party Repo Task force website and can be accessed directly at www.newyorkfed.org/tripartyrepo/pdf/Form_Investor_Letter_0511.pdf. Task Force member Dealers were required to distribute this communication to their clients by May 24, 2011.
    - A few key dates were agreed with respect to the timing of repo unwinds:
        - Since June 27, 2011 the unwind for non maturing repos (excluding rehypothecated collateral) was moved to 3:30pm NYT
        - Starting July 25, 2011 the unwind for maturing repos (excluding rehypothecated collateral) will move to 10:00am NYT
        - On August 22, 2011 the unwind for all tri-party repo trades will move to 3:30pm NYT (excluding Interbank GCF collateral)

    - It is important to note that any unwinds during this phase of the initiatives remain at the discretion of the Clearing Banks.

- Committed Credit Facility: As part of the re-engineering discussions of tri-party repo settlement mechanisms a new timeline will be established for the implementation of committed credit facilities for Dealers. In addition, in order to assess and monitor the potential funding situation of each Dealer each day a "cash-needs simulation" tool will be developed. The simulation tool will allow both parties to understand the aggregate financing posture of a Dealer based on confirmed trades prior to the Clearing Bank's execution of the afternoon unwind. While the cash-needs simulation is no substitute for the committed credit facilities that will accompany the end-state solution, both Clearing Banks believe that an aggregate financing test will provide valuable information prior to the execution of the afternoon unwind and will also help market participants better prepare for the forthcoming capped lines of credit. In order to implement the Committed Credit Facilities and the cash-needs simulation:

[3] 3-Way Trade Confirmation and Settlement Window Implementation Proposal (December 2010): http://www.newyorkfed.org/tripartyrepo/pdf/tpr_proposal_101203.pdf

[4] June 9, 2011 Press Release - Tri-Party Repo Infrastructure Reform Task Force Confirms Implementation of Three-Way Confirmations in August 2011: http://www.newyorkfed.org/tripartyrepo/pdf/PR_110609.pdf

- Both Clearing Banks are developing required functionality to implement a cash-needs simulation tool by November 14, 2011.
- Both Clearing Banks have drafted term sheets, including acceptable collateral requirements for Committed Credit Facilities and are actively reviewing with Dealer Clients.
- Term Sheets must be completed by November 14, 2011. Although the final enforcement date has not yet been determined, having term sheets in addition to the cash-needs simulation tool will enable Dealers to assess their cash and credit requirements, facilitating better management of intraday liquidity and repo maturities.
- The Task Force continues to develop an approach for the Tri-Party Repo Settlement Process (i.e. steps and timing for final settlement of maturing and new tri-party repos) as this approach will be a pre-condition for the implementation of committed credit facilities.

The timetable that the Task Force will set out later in 2011 will incorporate a new deadline for the implementation of committed credit facilities and the 10% cap on clearing bank exposure to a Dealer (as a share of its aggregate repo book).

- Documentation: A Legal Subgroup identified necessary changes to legal documentation to support the changes in operational arrangements have been identified.
    - In order to implement the Task Force recommendations, Tri-Party Repo market participants will need to sign amendments to their existing tri-party repo legal documentation. See Annex 1 for additional details.
    - Custodial Undertaking Agreement (CUA): The Clearing Banks have drafted the required changes in amendments to their established CUAs and are working with Dealers and Cash Investors to sign new agreements.
        - **Dealers and Cash Investors must have signed amendments by July 25, 2011**
        - Clearing Banks have also each developed supplemental operating guidelines to provide additional clarity for the amendment
    - Master Repo Agreement (MRA): There are no changes required to SIFMA's MRA at this point. However, this will be reviewed again pending a final solution for settlement.
    - SEC Rule Filing: FICC will submit a rule filing to the SEC for the changes required to accommodate the operational arrangement recommendations. This pertains to the FICC GCF Repo process only and does not cover any other process.

- Cash Investors: Best practices documents are being developed and published to support the tri-party repo market.
    - The Investment Company Institute (ICI) has completed its efforts to codify a series of best practices related to tri-party activities and associated risks for its members. The document can be accessed at: www.ici.org/mmfs/regdev/11_mmf_repo_checklist.
    - The Asset Managers Forum (AMF) are currently working on establishing best practices for netting which will be published on the Tri-Party Repo website once completed.

- Valuation: A working group on valuation issues met and developed several additional recommendations. (See Section 3)

- Tri-Party Statistics: Monthly statistics on the tri-party repo market, including information on aggregate volumes of collateral used in all tri-party repo transactions by asset class, concentrations, and margin levels have been made available through the Federal Reserve. Since May 2010 monthly reports have been hosted on the FRBNY Tri-Party repo website: http://www.newyorkfed.org/tripartyrepo/margin_data.html. Starting May 2011, monthly statistics on aggregate GCF Repo transactions are available as well.

Challenges: The challenge for the Task Force continues to be the need to ensure the efficiency for market participants of the tri-party environment while achieving the practical elimination of intraday Clearing Bank credit to the Dealers. Specific challenges include the interaction of the tri-party repo market with the GCF platform operated by FICC and the development of a settlement process that meets the needs of market participants.

Section 2: 2011 Roadmap to Practical Elimination of Intraday Credit by Clearing Banks

Recommendation 1.	**Implement operational enhancements to achieve the "practical elimination" of intraday credit by the Clearing Banks, where "practical elimination" is defined as a point beyond which the residual amounts of intraday credit extensions are both small and can be governed by transparent bilateral arrangements, known in advance to participants[5]. (30 Jun 2011)**

In order to achieve the objective of practical elimination of intraday credit by Clearing Banks, current trading timeframes and operational processes need to change. The Task Force has established a roadmap for working towards this objective through 2011 with the following key milestones:

- June 27, 2011: Non-maturing repos excluded from morning unwind
- June 27, 2011: Deal matching testing plan
- July 25, 2011: Unwind for maturing repos moves to 10:00am NYT start (interim)
- July 25, 2011: Signed amendments
- July 25, 2011: Deal matching testing in progress
- August 22, 2011: Morning unwind moves to 3:30pm NYT start
- August 29, 2011: Three-way deal matching mandatory for tri-party repos
- August 29, 2011: GCF Repo 3:00pm NYT close and other timing changes to accommodate afternoon settlement
- November 14, 2011: Cash-needs simulation

The following table lays out all the milestones and provides the required operating model changes for each tri-party repo market participant. By the end of the summer, the Task Force will update this roadmap for 2012 and beyond as the remaining open issues are resolved.

[5] Market participants should target the reduction in intraday credit to be less than 10% of a Dealer's notional tri-party book (representing the estimated portion of a Dealer's book that reaches final maturity and is not rolled with same counterparty on a given day).

Tri-Party Repo Reform 2011 Roadmap

Date	Milestone	Operating Model Changes		
		Clearing Banks / FICC	Dealers	Cash Investors
27-Jun	Non-maturing repos excluded from morning unwind	• Non-maturing repos (i.e. repos with maturity date not equal to current business day) excluded from the morning unwind and will unwind at 3:30pm NYT. • Exceptions to the above are repos with rehypothecated collateral (e.g. GCF Repo) which will continue to unwind in the morning. • Maturing repos will continue to unwind at 8:30am NYT.	• Must use automated collateral substitution to have access to the non maturing repo collateral. • Need to better manage allocation of GCF collateral to limit unwind.	• Leverage online reporting tools for substitution transparency. • Cash for non maturing repos no longer returned to Cash Investor accounts except in the case of cash substitutions • Final collateral reports received late in the day.
27-Jun	Deal Matching Testing Plan	• Dealers and Cash Investors need to have a testing plan in place for deal matching with their Clearing Banks. • Cash Investors need to have an agreed matching protocol.		
25-Jul	Unwind for maturing repos moves to 10:00am NYT start (interim)	• Non-maturing repos (i.e. repos with maturity date not equal to current business day) will continue to unwind at 3:30pm NYT. • Exceptions to the above are repos with rehypothecated collateral (e.g. GCF Repo) which will continue to unwind in the morning. • Maturing repos will now unwind at 10:00am NYT.	• Need to accommodate for the delayed unwind.	• No cash will be returned to Cash Investor accounts prior to 10am NYT.
25-Jul	Signed Amendments	• Clearing Banks have distributed amendments to Custodial Undertaking Agreement. • Signed amendments from the Dealers and Cash Investors are due		
25-Jul	Deal Matching Testing In Progress	• Dealers and Cash Investors should be testing deal matching with the Clearing Banks. • Clearing Banks and Dealers start providing readiness reporting		
22-Aug	Morning unwind moves to 3:30pm NYT start	• Clearing Banks will delay unwind for all tri-party repo trades until 3:30pm NYT. • Interbank (counterparties have different Clearing Banks) GCF collateral will continue to unwind prior to 8:30 AM. • Intrabank (counterparties have the same Clearing Bank) GCF will unwind at 3:30[6] since auto substitution capabilities will exist for Intrabank GCF collateral.	• Need to accommodate for the various timing changes to GCF repo substitution.	• Need an agreed netting protocol. • Follow best practice to wire cash as soon as possible. • Cash from maturing trades received no earlier than 3:30pm NYT

[6] Note that if a solution for substitution of rehypothecated collateral is not available yet, that population of collateral will continue to unwind at 8:00am NYT. Note that all unwinds referred to in the diagram above remain at the discretion of the clearing banks.

<table>
<tr><th rowspan="2">Date</th><th rowspan="2">Milestone</th><th colspan="3">Operating Model Changes</th></tr>
<tr><th>Clearing Banks / FICC</th><th>Dealers</th><th>Cash Investors</th></tr>
<tr><td>29-Aug</td><td>Three-way deal matching mandatory</td><td colspan="3">Deal matching will be mandatory and Clearing Banks will not settle unmatched trades.</td></tr>
<tr><td>29-Aug</td><td>GCF Repo Timing changes to accommodate afternoon settlement</td><td>• The GCF repo trading window ends at 3:00pm NYT (instead of 3:30pm).
• FICC end of day affirmation process shortened to 5-10 min (instead of 15 min)
• FICC delivers collateral files to the Clearing Banks by 3:20pm NYT
• Clearing Banks create GCF Repo trade shells by 3:30pm NYT
• Clearing Banks exchange Inter-Bank GCF Repo files, load data and make GCF reverse collateral available by 4:30pm NYT
• Clearing Banks allocate to the tri-party shells by 5:00/5:15/5:30pm NYT</td><td>• Dealers complete end of day Fed settlement processes and reconciliations by 3:45pm NYT
• Allocate to GCF Repo shells by 4:00pm NYT
• Dealers allocate to the tri-party shells by 5:00/5:15/5:30pm NYT when the total process concludes.</td><td>• Match majority of trades by 3:00pm NYT.
• Wire net funds for all confirmed trades by 3:30pm NYT.</td></tr>
<tr><td>14-Nov</td><td>Cash-Needs Simulation</td><td>• 3:30pm NYT Cash-Needs Simulation to monitor Dealer funding shortfalls will be introduced. This means there will be continued use of discretionary Clearing Bank credit to facilitate unwind.
• Real time Dealer funding view and selective collateral allocation simulation will also be introduced</td><td>• Begin to refine liquidity strategy, including earlier DTCC sweep
• Monitor funding via Clearing Bank cash screen
• Contact Cash Investors for unmatched / unfunded trades</td><td>• All Cash Investors netting as a best practice.
• Monitor deal matching tools to resolve exceptions.</td></tr>
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Section 3: Valuations

Recommendation 14. **The Task Force will establish a working group of valuation specialists across tri-party repo market participants to evaluate collateral pricing methods and make recommendations for improvements, including the feasibility of same-day pricing.**

Collateral Valuation

In response to Recommendation 14 of the initial Task Force publication, a Valuations Working Group was established to identify areas of improvement in the tri-party collateral pricing process. This Working Group consisted of volunteers from the Clearing Banks, Dealers, and Cash Investors. The primary focus of this Working Group was:

1. **Improve Price Transparency:** Explore whether Clearing Banks can provide incremental information to allow more insight into the source and accuracy of daily collateral pricing
2. **Increase Timeliness of Pricing:** Reduce the time lag between vendor price updates and price application to collateral flows
3. **Explore Availability of Market-Based Pricing:** Market participants to explore options to improve accuracy of vendor pricing

Improve Price Transparency:
As collateral is a key element of credit support in the tri-party market it is critical that market participants have complete transparency into the data source as well as the underlying pricing methodology. The Working Group believes that a transparent pricing process can lead to more stability in the market as Cash Investors will be more comfortable with the quality and accuracy of their pricing throughout the market cycle.

Recommendation #14A: Clearing Banks will disclose the Pricing Vendor who established the price of each asset on the Cash Investors' and Dealers' daily collateral statements

- This will allow Cash Investors to perform a more direct diligence process for the Vendors that provide prices for their assets
- Furthermore, we anticipate that this will empower Cash Investors to accept or reject certain asset classes based upon the designated pricing source

Recommendation #14B: Clearing Banks to coordinate a quarterly or semi-annual webinar for Vendors to present to prospective and current tri-party repo Cash Investors

- This recommendation is intended to increase transparency into Vendor pricing methodologies, allowing Cash Investors to understand every aspect of the pricing process
- This will provide a convenient forum for Cash Investors to conduct their diligence

Other areas of discussion

- The Working Group had several discussions with the various Vendors on the possibility of publishing a daily metric that quantifies the numbers of the 'market inputs' used to formulate the price
- Although several of the vendors have started to consider this type of metric the market currently does not have a widely accepted model that can be uniformly applied across all Vendors
- However, we believe the Clearing Banks should continue to have dialogue with the Vendors on this topic to provide guidance on how this will be valuable in the future

Increase Timeliness of Pricing

The Task Force originally raised the concern that pricing for certain asset classes were not being applied for ~24 hours after the original pricing was delivered by the Vendors. This delay was largely due to the daily unwind mechanics of the tri-party platform.

In response the Working Group briefly discussed the possibility of real time pricing updates from the Vendors. The Working Group quickly recognized that this was not a practical goal, and also recognized that most other OTC collateralized transactions are only remargined on a daily basis.

Recommendation #14C: When available, Clearing Banks will refresh pricing of assets at the beginning of the day as opposed to the end of the day.

Explore Availability of Market-Based Pricing

The Working Group also considered moving away from the Vendor pricing process. The intent was to use more specific transactional data to support pricing, as opposed to the price evaluation models used by the vendors[7].

Upon further discussion amongst the Working Group and the Pricing Vendors, we believe the price evaluation model serves two key roles that should not be changed:

1. Allows tri-party collateral pricing to remain with an independent 3rd party which we believe is critical for the integrity of the tri-party market
2. The evaluation process allows the market to adjust pricing based upon the broader market changes that may not be reflected in transactional data

Lastly, although the Working Group is very supportive of the Vendor pricing process, the Working Group does support the implementation of Recommendation 16 of the original Task Force Report. Recommendation 16 will require Dealers to compare Vendor pricing to their own internal marks and to notify Cash Investors where there is a material discrepancy. We believe that this adds an additional control to the market while maintaining the independence of the valuation agent.

Recommendation 16.	**Dealers to inform Cash Investors and Clearing Banks in cases where the Dealer's marks are materially below the vendor prices provided by the Clearing Bank.**

In order to facilitate the implementation of Recommendation 16 the Task Force decided the best approach would be to offer the following guidance.

- To provide recommendations on the definition of "materially below"; however Dealers and Cash Investors are free to negotiate their own notification requirement provided it is transparent and within the recommended threshold.
- The definition of materially below is subject to change as market conditions warrant and tri-party best practices evolve. Any changes to the formula would be communicated to the market participants via the Task Force website (www.newyorkfed.org/tripartyrepo).
- Notifications would include all securities and would be sent daily.
- The Task Force would not dictate next steps once price discrepancy notification is sent to allow bilateral agreement to be reached between each Dealer and their Cash Investors.

Proposed Definition for "Materially Below"

At the allocated account level, on a per trade basis, a combination of both the percentage price differential by CUSIP and proportional percentage of repo transaction will be used to define materially below. The proportional percentage used is determined by the collateral type confirmed by both counterparties in the 3 way confirmation.

[7] The Vendor's evaluation models rely on a combination of live trade data as well modeled inputs

Materially different would be defined as:
1. If all-in price difference is greater than 10% (all-in includes clean price[8] and factor but does not include the client's margin); and
2. If the aggregate dollar impact of all pricing differences identified in step 1 exceeds X% of an individual client's total investment (aggregate dollar impact is aggregated total of all CUSIPS meeting step 1 and allocated to the account); then a notice would be sent.

- Client is defined as individual customer (sub account level) not parent or top account total.
- X%= 2% for "Traditional Collateral": Securities clearing via the Fed Wire system (i.e. US Treasuries, US Agencies, Agency MBS)
- X%= 5% for "Non-Traditional Collateral": Securities clearing via the DTC system (i.e. equities, money markets, corporate bonds, private label MBS)

The following is an example: Client invests $100mm in Agency MBS tri-party with Dealer and is allocated CUSIP A and CUSIP B in the trade.

- Dealer runs materially different analysis – CUSIP A and B are priced at par by Vendor and Dealer has MTM at 0.89 on both CUSIPs. This would trigger step 1 above on each CUSIP so move to step 2 analysis.
- If the aggregate total price difference for CUSIP A and B is greater than $2,000,000 (2% of the client's total investment) then a notice must be sent. (2% is used in step 2 since Agency MBS is "Traditional Collateral")

Section 4: Monthly Tri-Party Repo Reporting

Recommendation 13.	**Initiate monthly publication, via the Federal Reserve, of aggregate statistics on tri-party repo collateral and Cash Investor margin levels, with disclosure by asset class, based on information provided by the Clearing Banks.**

Starting May 2010, the FRBNY began publishing summary statistics for the U.S. tri-party repo market online.

- Monthly summary statistics have been referred to or used in several commentaries and reports on tri-party repo and the Task Force's work, for example, Moody's report in February on TPR reform.
- The latest reports and historical reports are available online: http://www.newyorkfed.org/tripartyrepo/margin_data.html
- Enhancements will be made to these reports as data is available and as the industry calls for it. For example, GCF Repo data has been added to the monthly reports starting May 2011.

Section 5: Dealer Liquidity Risk Management

Recommendation 3.	**Dealers need to incorporate lessons from the financial crisis experience related to tri-party repo in making appropriate improvements to liquidity risk management and planning.**

Recommendation 4.	**Dealers should not assume that short-term tri-party repo financing with all of their counterparties throughout all market conditions is inherently stable.**

Recommendation 5.	**Dealers and Clearing Banks to assess and clarify terms for the potential availability of secured intraday credit facilities (both discretionary and committed) to mitigate the liquidity risks associated with maturing repo trades.**

[8] Accrued interest is not included as it is not part of the vendors' pricing service.

Given its focus on operational arrangements, the Task Force has not sought to benchmark Dealer progress in enhancing their liquidity risk management practices, with the expectation that regulators will place more supervisory focus on this topic.

Nevertheless, it is clear that Dealers have continued to focus attention in this area, both in the context of their discussions with the Clearing Banks related to secured intraday credit facilities, and more broadly. For example, many Dealers have sought to diversify their liquidity sources and lengthen the tenor profile, while also enhancing their systems and methodologies for measuring liquidity risk and the associated need for liquidity buffers.

The Task Force sought feedback from official authorities regarding industry efforts in this regard. This confirmed the view that efforts are underway within individual firms and highlighted the continued need for Dealers to concentrate attention on increasing the tenor profile of their secured funding.

Section 6: Contingency Planning

Recommendation 9.	**Cash Investors to put in place and regularly review contingency plans for a Dealer default that cover, at a minimum, a process for effectively managing collateral, including a plan to manage liquidity and risk exposure during the liquidation process.**

Recommendation 10.	**Relevant industry associations in conjunction with their constituents are encouraged to publish comprehensive Best Practice guidance for Cash Investors.**

On behalf of money market mutual funds, the ICI prepared a checklist to assist sponsors of money market funds to conduct stress tests and put in place contingency plans for a Dealer default. The checklist is available on the ICI's website at http://www.ici.org/mmfs/regdev/11_mmf_repo_checklist.

Section 7: Annexes

Annex 1 - Summary of Required Legal Documentation Changes

Custodial Undertaking Agreement (CUA)

- Three-way trade confirmation: Settlement is now contingent upon receipt of dual instructions. The CUA needs to allow for and address the following:
    - Dual matching instructions to constitute confirmation
    - Vendor supplied instructions to be valid
    - Definition of what is required for an amendment to an existing trade to constitute a three-way trade confirmation
    - For open trades, clarification that they can be unilaterally closed before 10:00am EST but any confirmation Clearing Banks receive after 10:00am EST must be bilaterally agreed (i.e. Clearing Banks need to receive confirmation from both the Cash Investor and Dealer)
- Late Day settlement and Delayed Unwind: The return of cash for maturing repos and settlement of new repos will not start until 3:30pm EST. To allow for this change, the CUA should:
    - Provide clarity and certainty that Clearing Banks are prevented from returning cash for maturing repos prior to 3:30pm EST.
    - There will likely be additional changes required but the details are dependent on a final solution for tri-party repo settlement
- The Clearing Banks will make these changes to their documentation in an amendment and work with Dealers and Cash Investors to sign new agreements.

Master Repo Agreement (MRA)

- There are no changes required to the MRA at this point. However, this will be reviewed again pending a final solution for settlement

SEC Rule Filing

- Auto Substitution: Based on the proposed solutions for auto-substitution, there is a possibility that cash substitution will be required.
    - An SEC Rule Filing needs to allow for cash substitutions of Inter-Bank GCF Repo.
- Late Day settlement and Delayed Unwind: The GCF Repo trading window will be shortened to end at 3:00pm EST instead of 3:30pm EST. The following is required to allow for this change:
    - Provide clarity and certainty that FICC is prevented from returning cash for maturing GCF Repos prior to 3:30pm EST
    - Changes to the SEC Rule Filing to reflect end time of GCF Repo trading window
    - Approval from Trading and Practices Committee of SIFMA
- FICC will file for the above changes to the SEC. This pertains to the FICC GCF Repo process only and does not cover any other process.

Other

- Dealers requiring committed credit facilities will need to negotiate the terms with their respective Clearing Banks or other alternative sources.

Table - List of Required Legal Documentation Changes

Task Force Recommendation	Documentation Change Required?	Required Changes	Legal Documentation			
			CUA[1]	MRA[2]	SEC Rule Filing[3]	Other
Auto Substitution						
Implement intraday securities for securities or cash for securities substitution	NO	N/A				
Cash substitutions for Inter-Bank GCF Repo	YES	SEC Rule Filing: Needs to allow for cash substitutions	No	No	Yes	No
Elimination of daily unwind for term repos	NO	N/A	No	No	No	No
3-Way Trade Confirmation						
Settlement of a trade is contingent upon receipt of dual instructions	YES	Dual Matching Instructions	Yes	No	No	No
		Ensure that vendor supplied instructions are valid	Yes	No	No	No
		Clearly define what is required for amendments / revisions to constitute as a 3-way confirmation	Yes			
		Confirmation requirements for closeout of Open Trades (unilateral before 10am, bilateral after 10am)	Yes	No	No	No
Late Day Settlement						
Delay unwind until 10am EST	NO	N/A				
Delay unwind until 3:30pm EST	YES	Provide clarity and certainty that Clearing Banks are prevented from making exceptions	Yes	No	No	No
Unwind of GCF Repo collateral at 3:30pm EST	YES	Provide clarity and certainty that FICC are prevented from making exceptions	No	No	Yes	No
Ending GCF Repo trading window at 3pm EST	YES	1- Approval from Trading and Practices Committee of SIFMA 2- SEC Rule Filing needs to reflect GCF Repo trading window ends at 3pm EST	No	No	Yes	No
Settlement Process after 3:30pm EST if Dealer has insufficient liquidity to cover all its maturing repos on a given day	YES	Clear procedure for tri-party repo settlement	TBD	No	No	No
		Defining what does and does not constitute an event of Default under late date settlement	No	No	No	No
Committed Credit Facility	YES	Bilateral negotiations between Dealers and Clearing Banks	No	No	No	Bilateral Agreement
Non Operational Recommendations						
Dealer liquidity risk management	NO	N/A				
Margining Practices	NO	N/A				
Contingency Planning	NO	N/A				

[1]CUA - Custodial Undertaking Agreement

[2]MRA - Master Repo Agreement

[3]FICC files to SEC

Annex 2 - Firms Represented on the Task Force Tri-Party Repo Infrastructure Reform Task Force

Role	Firm Name
Task Force Chairman	UBS Investment Bank
Oversight	Payments Risk Committee
Clearing Banks	Bank of New York Mellon JPMorgan Chase
Dealers	Bank of America Barclays Capital Citigroup Global Markets Inc Credit Suisse Deutsche Bank Goldman Sachs JP Morgan Chase Morgan Stanley BNP Paribas UBS Investment Bank Jefferies & Company
Investors	Fannie Mae Federated Fidelity Invesco State Street Bank of New York Mellon
Hedge Funds	Citadel Investment Group
Utilities	Fixed Income Clearing Corporation (FICC)
Industry Groups	Investment Company Institute (ICI) Securities Industry and Financial Markets Association (SIFMA) Managed Funds Association (MFA) The Asset Managers Forum (AMF)
Technical Advisors	Federal Reserve Board Federal Reserve Bank of New York Securities and Exchange Commission U.S. Department of the Treasury

Annex 3 - Summary List of Task Force Recommendations

Operational Arrangements – The Task Force Recommendations set out the milestones for the industry action plan developed and agreed by the Task Force to eliminate to the greatest extent possible Clearing Bank extensions of intraday credit by enhancing operational arrangements in the tri-party repo market. Recommendations are addressed to all tri-party repo market participants unless specified.

1.	Implement operational enhancements to achieve the "practical elimination" of intraday credit by the Clearing Banks, where "practical elimination" is defined as a point beyond which the residual amounts of intraday credit extensions are both small and can be governed by transparent bilateral arrangements, known in advance to participants[9].	30 Jun 2011
1A.	Clearing Banks to provide project plans in relation to their implementation of robust automated collateral substitution ("auto-substitution") capability.	15 July 2010
1B.	Eliminate remaining sources of ambiguity or inaccuracy in tri-party repo booking procedures and trade communications to the Clearing Banks, including information related to the term of the transaction.	31 Aug 2010
1C.	Agree to standardized intraday settlement time(s) for maturing repo trades (e.g., Morning Settlement, End of Day Settlement), that will be implemented following pre-requisite enhancements (e.g., auto-substitution).	31 Aug 2010
1D.	Agree solution(s) for three-way, real-time, point of trade confirmations for tri-party repo transactions, inclusive of discussions with third-party vendors.	15 Oct 2010
1E.	Clearing Banks to complete development of software to support auto-substitution capability and confirm timelines for full implementation.	15 Feb 2011
1F.	Dealers and Cash Investors to confirm that internal processes related to all aspects of tri-party repo are prepared for the operational enhancements recommended in this Report.	15 Feb 2011
1G.	Implement market-wide, three-way, real-time, point of trade confirmation solution(s) which memorializes legally binding repo transactions entered into between Cash Investors and Dealers.	15 Apr 2011
2.	Dealers and Cash Investors to undertake regular due diligence reviews of Clearing Banks that cover, at a minimum, operational and contractual conformity, adherence to collateral allocation rules, and collateral pricing methodologies.	Ongoing

Dealer Liquidity Risk Management – The Task Force Recommendations support other assessments of the financial crisis in emphasizing the importance of stronger liquidity risk management.

3.	Dealers need to incorporate lessons from the financial crisis experience related to tri-party repo in making appropriate improvements to liquidity risk management and planning.	Ongoing
4.	Dealers should not assume that short-term tri-party repo financing with all of their counterparties throughout all market conditions is inherently stable.	Ongoing
5.	Dealers and Clearing Banks to assess and clarify terms for the potential availability of secured intraday credit facilities (both discretionary and committed) to mitigate the liquidity risks associated with maturing repo trades	15 Nov 2010

Margining Practices – The Task Force Recommendations support a broad strengthening of margining practices, based on the principles that margins should be risk-based, should not be pro-cyclical, and should be based on objective/transparent criteria.

6.	Cash Investors, Dealers, and Clearing Banks to determine appropriate collateral margins in line with the principles set out in Section 6 of this Report, taking note of monthly Tri-Party Repo Statistics to be published on the Federal Reserve Bank of New York website.	Ongoing
7.	Clearing Banks to continue to share information on intraday margin methodologies and processes with respective Dealers.	Ongoing

[9] Market participants should target the reduction in intraday credit to be less than 10% of a Dealer's notional tri-party book (representing the estimated portion of a Dealer's book that reaches final maturity and is not rolled on a given day).

Contingency Planning – The Task Force Recommendations support improving the preparedness of Cash Investors and the tri-party repo market to cope with a Dealer default.

8.	Cash Investors to undertake regular stress tests of tri-party repo counterparty exposures that consider a default of the largest repo counterparty together with potential changes in the market value of the underlying collateral.	Ongoing
9.	Cash Investors to put in place and regularly review contingency plans for a Dealer default that cover, at a minimum, a process for effectively managing collateral, including a plan to manage liquidity and risk exposure during the liquidation process.	15 Jan 2011
10.	Relevant industry associations in conjunction with their constituents are encouraged to publish comprehensive Best Practice guidance for Cash Investors.	30 Sep 2010
11.	DTCC and its affiliates to work with other market participants to maximize the potential for offsetting of positions in the event of a Dealer default; DTCC and/or other interested parties can provide a viable collateral liquidation management service for those Cash Investors wishing to delegate these activities	30 Nov 2010
12.	All market participants to continue exploring additional concepts that have the potential to add to the stability and resilience of tri-party repo financing and/or reduce the potential for collateral “fire sales” in the event of a Dealer default.	Ongoing

Transparency – The Task Force Recommendations are intended to increase transparency with respect to the size, composition, and concentration of the tri-party repo market, the range of margins applied, and the valuation methodologies applied to the underlying repo collateral.

13.	Initiate monthly publication, via the Federal Reserve, of aggregate statistics on tri-party repo collateral and Cash Investor margin levels, with disclosure by asset class, based on information provided by the Clearing Banks. (See Table 1 for a pilot version.)	30 Jul 2010
14.	The Task Force will establish a working group of valuation specialists across tri-party repo market participants to evaluate collateral pricing methods and make recommendations for improvements, including the feasibility of same-day pricing.	15 Oct 2010
14A.	Clearing Banks will disclose the Pricing Vendor who established the price of each asset on the Investors’ and Dealers’ daily collateral statements	Ongoing
14B.	Clearing Banks to coordinate a quarterly or semi-annual webinar for Vendors to present to prospective and current tri-party repo Investors	Ongoing
14.C	When available, Clearing Banks will apply refreshed pricing to assets at beginning-of-day following the price refresh, as opposed to the end-of-day following the refresh.	Ongoing
15.	Cash Investors to regularly validate tri-party collateral for pricing, appropriateness, and classification. Dealers to regularly compare collateral marks on their own books and records with vendor prices provided by the Clearing Banks	Ongoing
16.	Dealers to inform Cash Investors and Clearing Banks in cases where the Dealer’s marks are materially below the vendor prices provided by the Clearing Bank.	Ongoing

New recommendations discussed in the report are highlighted in blue.