US TRI-PARTY REPO TASK FORCE : OPERATIONAL ARRANGEMENTS WORKING GROUP

3 Way Trade Confirmation & Settlement Window Implementation Proposal

December 2010

Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

Page

Background

- In 2009, The Federal Reserve Bank of New York (FRBNY) asked the Payments Risk Committee a private sector group of senior U.S. bank officials sponsored by the FRBNY to form a task force to address the weaknesses of the U.S. tri-party repo market that became visible during the course of the financial crisis. The U.S. Tri-Party Repo Infrastructure Reform Task Force (Task Force) was created.
- On May 17, 2010, the FRBNY published a White Paper to discuss policy concerns regarding weaknesses in the U.S. tri-party repo market infrastructure as well as to seek comment on the recommendations submitted by the Task Force in its report also published on May 17, 2010.
- The full versions of these two documents can be found on the Tri-party Repo Infrastructure Reform Task Force's web site at the following address: <u>http://www.newyorkfed.org/tripartyrepo</u>
 - Subsequent to the release of the White Paper and Task Force recommendations, various working groups and work streams within the Task Force were asked to continue with the next phase of work – to draft proposals regarding processes and work flows in line with each recommendation and in support of the ultimate implementation of those recommendations. The Operational Arrangements Working Group was specifically tasked with creating operational proposals on the recommendations of Three Way Trade Confirmation and Standardized Settlement Time to help achieve the ultimate goal of the "practical elimination" of intra day credit provided by the clearing banks.
 - This document outlines the proposals for the Three Way Trade Confirmation process (deal matching) and Settlement Time process and also outlines an implementation time table for those processes and the other recommendations included in the Operational Arrangements portion of the report. We ask that any comments regarding these three proposals be submitted by January 14, 2011 to <u>tpr.reform@ny.frb.org</u>. Comments are welcomed and will be made public on the Tri-party Repo Infrastructure Reform Task Force's web site.

Scope

- In scope for the Task Force recommendations are U.S. Tri-Party Repo transactions and the tri-party leg of a Borrow/Pledge transaction for all collateral types, including fixed income and equity securities. Clearance activity (receive and deliver activity processed over the FED Securities Wire and DTCC settlement system) is not in scope for these initiatives. Bi-lateral repo deals settle over these two systems and are, therefore, out of scope. Also not in scope are any tri-party collateral management transactions which utilize the clearing bank's collateral management systems functionality but do not inherently create intra day exposure for the clearing banks (i.e. collateral posted as margin, Hold-in-Custody (HIC) or Segregated accounts).
- The Operational Arrangements Working Group was tasked with submitting proposals for comment concerning two recommendations originally outlined by the Task Force:
 - Agree solutions for a three-way, real time, point of trade confirmation process for U.S. tri-party repo transactions
 - Agree to standardized intraday settlement time(s) for maturing repo trades.
 - In addition, the Working Group has proposed an implementation schedule which outlines the various initiatives, roll out periods for each and the ultimate cut off dates.

Key Assumptions

The proposals outlined in this document were developed with a set of rules or requirements in mind which will satisfy the vast majority of market participants.

- Three Way Trade Confirmation Process:
 - The trade confirmation process needs to be a real time, point of trade process whereby both dealers and cash investors submit or confirm tri-party repo trade instructions with the clearing banks or via a third party vendor. Specific, mandatory fields will be required to be submitted by both parties. The process must allow for all dealers and cash investors, regardless of trade volumes or level of communication ability, to provide trade instructions at the account level. Once provided to the clearing banks, the trade instructions can be "matched" or confirmed and then deemed pending for settlement. Modification and cancel/correct functionality as well as real time status updates must be part of the process. <u>All market participants must conform to the process by August 2011 in order to be a participant in the tri-party repo market</u>. A phased implementation of the roll out to market participants must be supported starting on April 15, 2011.
 - Settlement Time Process:
 - Maturing tri-party repo trades and the subsequent settlement of new tri-party repo trades should be settled within a standard window of time to reduce the intra day credit provided by the clearing banks. The settlement window must factor in standard industry time schedules such as FED Securities Wire open and close, FED Funds Wire open and close, repo trading windows, account allocation breakdown parameters, "late day" fund trading, DTCC securities movements and GCF (General Collateral Facility) settlement periods and time schedules. The transition to the new settlement window will be implemented in phases starting in July 2011.
 - Implementation Schedule:
 - The implementation schedule for the various parts of the initiative will be staggered to reduce implementation risks and costs. A phased approach, with sufficient time and advance notice for all market participants to meet the deadlines and permit confirmation that the step is sufficiently on course before moving to the next phase. Strict cut-off dates must be established which will preclude participants from transacting tri-party repo trades if the deadlines are not met.

3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

Tri Party Repo Three Way Confirmation: Background

Key Assumptions / Definitions

- Currently in the US there is no industry wide formalized two-way (Dealers and Cash Investors) or three-way (adding Clearing Agents) Tri Party Repo (TPR) trade confirmation practice at the time of execution.
- Currently not all market participants submit TPR trade information to Clearing Agents.
- An industry standard confirmation process will improve the quality and timeliness of TPR trade information across all three repo parties.
- All TPR trades will be confirmed electronically.
- There are three forms of TPR trade confirmation:
 - □ Initiation of New TPR trades (overnight, open or good till canceled (GTC) or term)
 - Modification of TPR trades (open, structure changes)
 - Close out of open TPR trades (submit maturity date instructions prior to 10:00 am NYT)

Confirmation Timing / Drivers (stated in Eastern Standard Times)

7:00 am 10:	00 am	3:30 pm	4:30 pm	6:00 pm
 TPR Trading Begins TPR trades are executed during the morning period; confirmation process begins. By 10:00 am, the majority of TPR funding is complete. 	 Intraday TPR Trading / Allocation Best practice is trades will be allocated at the account level within a reasonable period of time after trade execution. Once allocations are estimated or finalized, three way TPR confirmation occurs and TPR trades are communicated to the Clearing Agents. Confirmed TPR trades can be changed throughout the trading day with matching instructions (in most cases). 	 TPR trades executivity window can still the Clearing Age settlement that s Confirmed TPR to the test of test	<u>R Trades</u> Ited which miss the settle be confirmed and comm nts by the close of the se	unicated to ttle date for roughout

Ч

Tri Party Repo Three Way Confirmation: Proposed Workflow Summary

Workflow Summary

To support the diversity of the cash lender population, we are proposing 3 distinct confirmation workflows, varying from limited technology requirements to more sophisticated messaging technology. The following slides will detail each workflow. By way of summary the 3 flows are:

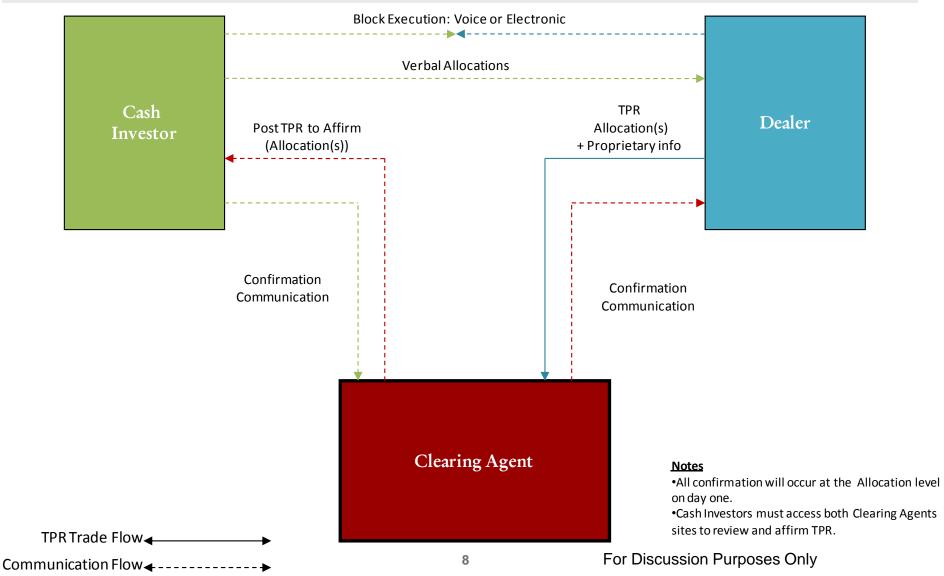
- U Workflow 1: Cash Investor Affirms via Clearing Agent (web-based solution)
 - Implementation Strategy: Limited Technology Requirements/Support
 - Target Availability Date: April 15, 2011
 - Description: Affirmation model that will be supported by both Clearing Banks. Investors will need to monitor each Clearing Bank's web site. Cash Investors will provide account allocations to the Dealers who will drop those account allocations down to the Clearing Banks. Clearing Banks will post account allocations on their web sites and Cash Investors will manually affirm each allocation. With any affirmation process the potential to affirm trades that do not necessarily reconcile to individual systems exist within this model. This model requires a limited technology build if any and due to the amount of manual intervention will most likely be suited for the low volume investor.
- U Workflow 2: Cash Investor / Dealer message Clearing Agent; Agent performs Confirmation
 - Implementation Strategy: Moderate Technology Requirements/Support
 - Target Availability Date: April 15, 2011
 - Description: Cash Investors will need to communicate account allocations to the Dealers. Dealers and Cash Investors will independently submit
 account allocations to the Clearing Banks. Cash Investors will need to build or utilize a service provider to feed TPR trades down to each
 Clearing Bank. Investors will need to monitor each Clearing Banks web site for any potential unmatched trades.
- Workflow 3: Cash Investor/Dealer message Vendor; Vendor provides Clearing Agent the Cash Investor message; Dealer provides Agent message; Agent Confirms messages
 - Implementation Strategy: Advanced Technology Requirement/Support
 - Target Availability Date: June 2011
 - Description: Cash Investors and Dealers will submit block level TPR information to the vendor and will match at the block level. Cash Investors will pass account allocations through the Vendor to the Dealer. Dealers will filter that information back to the Vendor for a matched allocation. As long as the trades are matched at the Vendor level the matched account allocations will drop down to the Clearing Banks. The Vendor based solution provides a singular platform for Cash Investors agnostic of the Dealer or Clearing Bank. This solution provides STP between the Cash Investors and Dealers and the only one that can currently support block level matching.
- All three workflows will be developed and made available to all market participants. Each TPR investor will have to decide which workflow best fits their operational needs. The Operational Arrangements Working Group is not recommending one over another.

۵

 \supset

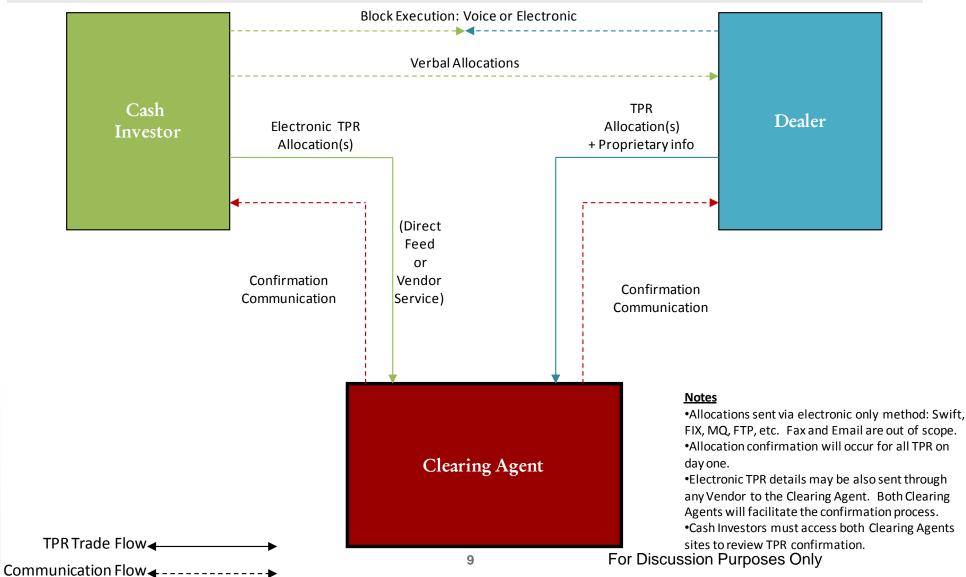
Confirmation Workflow Proposal

- Workflow 1: Cash Investor Affirms via Clearing Agent (web-based solution)
 - □ Implementation Strategy: Limited Technology Requirements/Support
 - □ Target Availability Date: April 15, 2011



Confirmation Workflow Proposal

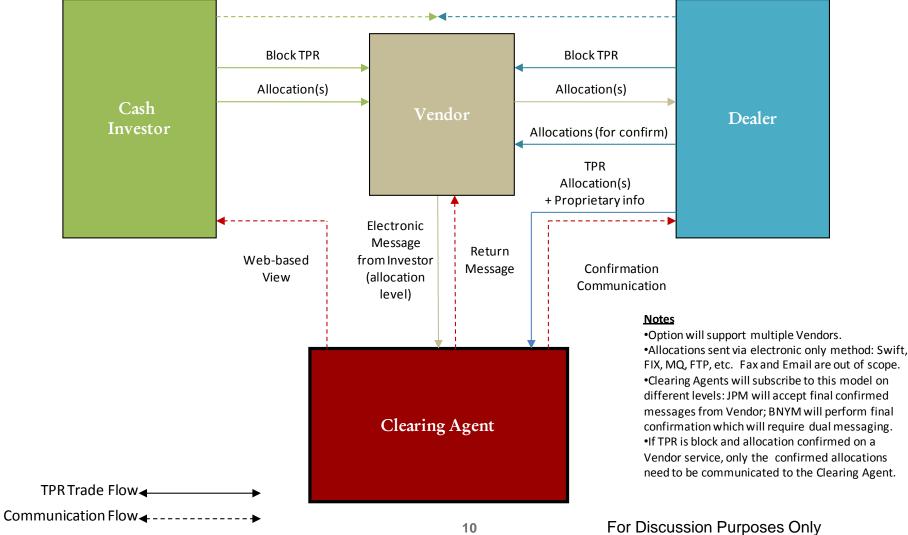
- Workflow 2: Cash Investor / Dealer message Clearing Agent; Agent performs Confirmation
 - □ Implementation Strategy: Moderate Technology Requirements/Support
 - □ Target Availability Date: April 15, 2011



Confirmation Workflow Proposal

Workflow 3: Cash Investor/Dealer message Vendor; Vendor provides Clearing Agent the Cash Investor message; Dealer provides Agent message; Agent Confirms messages

- Implementation Strategy: Advanced Technology Requirement/Support
- Target Availability Date: June 2011



U U K N പ്പ Ο \geq S ⊢ Z ш \geq ш Ċ ΑN ARR SΑ ONFIRMATION WORKFLOW PROPO TIONAL . ∀ ⊻ ш E:OP К С 0 LL_ \leq S \triangleleft \vdash 0 Ū. ш Ľ \odot \succ ш í-TRADI WΑΥ R \vdash S \supset co

۵

 \supset 0 പ്പ

Field Matching Proposal

Minimum Parameters Required for TPR Matching

- 1. <u>Buyer Legal Entity</u>: The specific fund/account ID at the Clearing Agent; Cash Investors will need to begin storing ID data (PID/UID for BNYM, Profile ID for JPM).
- 2. <u>Seller Legal Entity</u>: The specific Dealer ID at the Clearing Agent.
- 3. <u>Transaction Type</u>: Defaults to Repo (RPO); other selections: Reverse (REV), Deliver/Receive Pledge (DRP).
- 4. <u>Trade date</u>: (MM/DD/YYYY) The date the TPR's terms are agreed.
- 5. <u>Settlement/start date</u>: (MM/DD/YYYY) The date on which the Investor's cash begins funding the Dealer's inventory.
- 6. <u>Currency</u>: (CCY) Default to USD.
- 7. <u>Principal</u>: (NNNNNNNNNNNNN)The size of the TPR financing, listed in the units of currency defined in field 6.
- 8. <u>Rate</u>: (NNNN bps) The rate on Day 1 of the TPR.
 - a) Rate Benchmark: Only populated when TPR is Floating (Appendix A, max 20 character alpha numeric).
 - b) <u>Rate Spread</u>: (NNNN bps) Only populate when Floating.
- 9. <u>Maturity Date</u>: (MM/DD/YYYY) The date when a TPR matures:
 - a) <u>Overnight</u>: booked to next business day (based on the Fedwire Holiday Calendar available at <u>http://www.frbservices.org/holidayschedules/index.html</u>)
 - b) <u>Term</u>: booked to a specific future business day.
- 10. <u>Collateral Type ID</u>: In conjunction with the Buyer Legal Entity field, this will create a unique collateral identification for matching purposes only (Appendix B, nine character alpha numeric).
- 11. <u>Open:</u> Defaults to "N", "Y" to indicate an Open TPR. Open is defined as a day to day TPR that is good to close. This field is mandatory for matching. If TPR is marked as Open ("Y"):
 - a) The Open field will take precedence over the Maturity Date field (#9), therefore, the Maturity Date field will no longer be mandatory for matching on Open TPR.
 - b) The TPR will remain Open at the Clearing Agent pending that notification to unilaterally close the trade by 10:00 am NYT. As a best practice, parties will match on the close of the Open TPR and communicate accordingly to the Clearing Agent. However, it is noted that parties have a unilateral right to close the TPR and message the Clearing Agent individually to close the Open TPR. Post 10:00 am close outs of Open trades will require a matched trade confirmation.
- 12. New Field: "<u>Structure Type</u>": Specifically defines the structure options of a TPR –Call (CAL), Put (PUT), Evergreen (EGR), Extendable (EXT). Field default is "blank". Field is mandatory for matching.
- 13. New Field: "<u>Minimum Notice Period</u>": (NNN) Number of days on which party has the ability to take action on structured TPR. Field is dependant on population of Structure Type field (Call, Put, Evergreen, Extendable) and is mandatory for matching.

* Not all data to book a TPR at the Clearing Agent is included in the above Matching Fields, additional data enrichment fields (e.g. trade ID) will be available through TPR messaging specifications issued by the Clearing Agents.

۵

Matching Requirements

- Trade matching functionality will be available for April 15, 2011.
- All fields under "Field Matching Proposal" are mandatory for matching.
- If a TPR trade cannot be matched, the clearing banks will not settle the trade. The dealer and lender are responsible for ensuring final trades match by the 3:30pm deadline. To facilitate the matching process, the clearing banks will provide information about trade status.

Trade Communication Proposal

- To conform to industry communication standards, the Working Group is adopting electronic messaging standards.
- Key benefits:
 - Leverages current electronic industry communication protocol which both Clearing Agents support.
 - Removes manual methods (fax, email, voice).
 - Standardizes communication format types.
 - Provides specific audit dates and times of all messaging communications.
 - Communication can be sent through the SWIFT network, FIX, Clearing Agent Proprietary Formats or via standard messaging protocol using SWIFT messaging types (FTP, MQ, etc.).

Proposed Message Types

- In-bound SWIFT messaging format to the Clearing Agent: MT527
- Return SWIFT messaging format to Dealers / Cash Investors / Vendors:
 - MT558
- Each Clearing Agent will outline each message type specification along with additional TPR enrichment fields.

۵ \supset

0 പ്പ

Ċ Ċ X

പ്പ Ο \geq

S

⊢ Z

ш

∑ ⊟

Ċ Ā

പ്പ

് S A

0

ROP

۵

CONFIRMATION WORKFLOW

ш

RA

 \vdash

WΑΥ

co

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
	00
Questions for Public Comment	20
Frequently Asked Questions	22
	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

Tri Party Repo Settlement Structure: Background

Key Assumptions / Definitions

- There are three forms of TPR settlement:
 - 1. Initiation of New Trades: the exchange of cash and securities to support a new confirmed TPR trade
 - 2. Maturation of Prior Trades: the return of cash and securities at the scheduled maturity date of the TPR trade
 - 3. Redistribution of Cash and Collateral for Rolling Trades: assuming unchanged trade amount, should not require any cash wires in/out, but may require a redistribution of funds within lender accounts and will likely have a changing collateral composition daily.
- The finite set of trade types that are in scope for daily settlement include:
 - Term trades on scheduled maturity date
 - Open trades with a confirmed / matched cancel request
 - □ Single day trades (overnights and rolling)
 - Newly confirmed / matched trades
- To successfully execute a full TPR settlement process, 5 prerequisites must be satisfied:
 - 1. Matched /confirmed trade instruction received by the Clearing Bank
 - 2. Sufficient cash (or credit) in Dealer's accounts to support planned maturations
 - 3. Sufficient cash in Lender's accounts at Clearing Bank to support new confirmed trades
 - 4. Sub-account allocation details from Lenders to support new trades / rolling trades
 - 5. Stable and sufficient collateral composition to perform optimal collateral allocation by dealers

Settlement Timing Considerations / Drivers

3 pm

Key drivers for pushing back the start of the settlement window

- Time required for cash investors to submit allocated trade detail and wire in cash
- Active intraday trading of securities until the Fed Securities wire close & cleanup period ends at 3:30pm
- DTC sweep activity occurring at 4pm
- GCF securities posted to dealer's accounts between 4:30pm - 4:45pm
- Certain fund families closing at 5pm, therefore unable to provide account breakdowns until approximately 5:15pm

Critical activities occurring within the settlement window

- Dealers performing optimal collateral allocations / reallocations
- Clearing Banks validating appropriate collateralization
- Margin calls
- Clearing Banks moving cash and/or chasing down wires

Key drivers for an earlier end to the settlement window

6 pm

- Insufficient time to wire in/out funds prior to the close of the Money wire at **6pm**
- Cash Investors need for return of invested cash to meet redemptions, etc
- Insufficient time to perform any end of day cleanup or redistribution if required
- Insufficient time to locate alternative financing if planned trades fail
- Inability for lenders to receive their collateral reports prior to end of the day

۵

 \supset

Tri Party Repo Settlement Structure: Proposal

Settlement Window Proposal

- Given the competing pressures, there will be no ideal time / window to execute settlement. However, the working group is proposing a target settlement window to be between 3:30pm 4:30pm. Key benefits of this window include:
 - Occurs late enough for the majority of lenders to provide their sub account details (approx 90% of funds are closed by 4pm)
 - Starts post the Fed Securities wire clean up period so dealers have a relatively stable view of their collateral in order to perform final collateral allocation
 - Ends early enough to provide time for any alternative financing to be obtained
 - Allows time for lenders to access the cash from maturities and redeploy as required
 - Provides time for lenders to receive and review collateral reports on the same day as the trades are locked
 - Provides sufficient time for the Clearing Banks to perform required settlement activities

Proposed Settlement Process Timeline

Prior to Fed Securities Wire Close (start of day to 3:30pm) : TPR Trading Window

- Dealers and Lenders submit trade details at allocated level for new trades
- Dealers and Lenders submit trade modification details for existing trades
- Dealers and Lenders submit cancel instructions for any open trades prior to 10am (current market best practice)
- All trades executed prior to 10am are confirmed at the allocated level
- Lenders wire in funds for any new matched / confirmed trades

3:30pm – 4:30pm : TPR Settlement Window

- Clearing Banks provide Dealers view to their TPR financing position:
 - Cash obligations due to confirmed maturities offset by the aggregate of any cash wired in for new confirmed TPR trades, dealer cash balance, and credit line from the Clearing Banks
 - If they have sufficient cash/credit to meet their confirmed obligations, the Dealer can initiate an 'Auto Settle' process for all confirmed TPR trades
 - If they do not have sufficient cash/credit, they can delay the initiation of Auto Settle and obtain additional cash and/or perform individual maturations to the limit of their cash/credit
 - Lenders wire in cash for any remaining newly confirmed trades
- 4:30pm 6:00pm : Post Settlement
 - Lenders will receive their final collateral reports
 - Clearing Banks will perform end of day clean up and processing
 - Once a Dealer has initiated the Auto Settle process, any new confirmed TPR trades that come in will be attempted to be filled with any remaining unencumbered collateral.

Key Challenges / Next Steps

- A 3:30 settlement start is challenging for Dealers given the current timing of the end of day GCF and DTC Sweep processes. Both events affect the Dealer's collateral composition and are key precursors to running an optimal collateral allocation
 - Will work with the FICC and Dealer community to explore opportunities to compress the GCF process and potentially end GCF trading earlier to allow an earlier start to the netting / posting process
 - □ Will work with Dealers to explore performing DTC sweeps earlier
- A 3:30 settlement start is challenging for Lenders as there are fund families that close at 5pm so will fully miss the recommended settlement window
 - While not likely to move their close time, we estimate the impact of these funds to be small (<10%). Also, we believe while still on a 'best efforts basis', the majority of these late trades will still successfully settle.
- A 6pm money wire cutoff is challenging for the industry given the proximity of other market cutoffs.
 - Although unlikely, will explore the ability to allow specific TPR wires to be preloaded so they can execute after 6pm if required, potentially until 6:30
- Given the significance of these recommended changes and the challenges to execution, we are recommending a phased approach to implementation.
- By April 2011, the working group aims to have clearly defined solutions to the key risks to execution defined above. Specifically:
 - Modification of the GCF Repo trading and settlement process
 - Acceleration on the DTC Sweep process
 - Allowance for late day funds / trading
 - Cash netting for all lender clients

۵

 \supset

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

Proposed Implementation Schedule: Key Assumptions

Key Assumptions

- All implementation dates will be selected to avoid any high activity dates. Specifically:
 - Month Ends
 - Quarter Ends
 - □ High volume settlement / funding days
- A broad reaching communication / education effort will accompany the rollout of the recommendations to ensure consistent understanding and preparedness of market participants.
- Impacts to the markets for the various securities "locked up" in repo transactions and the removal of the cash unwind will be monitored at each phase of the implementation to permit assessment of consequences and, if appropriate, an opportunity to address significant challenges.
- The movement to the 3:30 pm settlement window will require well defined solutions to the GCF Repo challenge as well as DTC sweeps and cash netting. These solutions will be developed and communicated by April 2011 to ensure market readiness.
- While the goal is to reduce the settlement window to 1 hour, ending at 4:30 pm, the August 2011 implementation will allow the settlement window to extend to the end of the trading day. By April 2011, the Task Force Working Group will propose a defined set of process / toolset / incentive changes required to support the change, but market adoption rates may vary. The goal is to have the window shortened to 1 hour by Dec 2011.
- While both Clearing Banks will start making Committed Credit Term Sheets (pricing and governing principles for committed credit facilities) available to Dealer Clients by February 2011, the size of those lines may be adjusted as the implementation of solutions will inform specific client needs. Also, Dealer acceptance of the terms will be discretionary as they may obtain credit via an alternate source/provider.

Proposed Implementation Schedule: List View

Key Deliverables by Month

Feb 2011

- Clearing Banks to implement Auto Substitution
- Clearing Banks begin supplying Committed Credit Facility Term Sheets to Dealer clients
- Dealers should continue to explore alternative/additional credit facilities, if required

April 2011: estimated 20%-30% of credit extension eliminated

- Clearing Banks to implement 3 Way Trade Confirm/Matching
- Task Force Working Group presents approach to supporting 3:30 settlement time initiation and netting

June 2011: estimated 40%-50% of credit extension eliminated

- All dealers leveraging Auto Substitution
- All term trades (non GCF) will remain locked until maturity date
- Vendors to implement 3 Way Trade Confirm/Matching

July 2011: estimated 70%-80% of credit extension eliminated

- All Dealers and all large Lenders participating in 3 Way Trade Confirm/Matching
- Status of rolling and open transactions communicated to Clearing Banks by 10am EST, with supporting account breakdowns
- Clearing Banks to move daily unwind to 10am EST (versus today's 8am process)
- Lenders to begin establishing alternative sources of intraday liquidity, if required
- Lenders to begin wiring in funds prior to 3:30pm, if required
- All lenders participating in cash netting (pending solution proposed in April 2011)

August 2011: estimated 90% of credit extension eliminated

- All Dealers and all Lenders participating in 3 way trade confirm/matching
- Any trades submitted without a match/confirm will not be executed by the Clearing Banks
- Majority of confirms received by 10am EST, most of the remaining (excluding 5pm funds) received by 3:30pm, including account breakdowns
- Clearing Banks move the daily unwind to 3:30pm EST
- GCF process adjusted to complete by 3:30pm (pending solution proposed in April 2011)
- DTC sweeps adjusted to complete by 3:30pm (pending solution proposed in April 2011)
- Dealers can begin running collateral allocation post 3:30pm
- Lenders wire in all required funds for repos by 3:30pm (recognizing netting on existing trades)
- Dealers begin subscribing to capped committed credit lines with the Clearing Banks (or other sources of committed credit to support maturations)

September 2011

- Clearing Banks to continue monitoring credit requirements and collateral allocation timing
- Dealers to continue subscribing to committed credit lines
- Market to gauge impact of Q3 Quarter End activity

October 2011: 10% credit capped with committed credit lines

- All dealers to have subscribed to capped committed credit facilities with the Clearing Bank or an alternative source
- Clearing Banks to stop providing uncommitted intraday credit to support the TPR market (maturations and substitutions)

December 2011

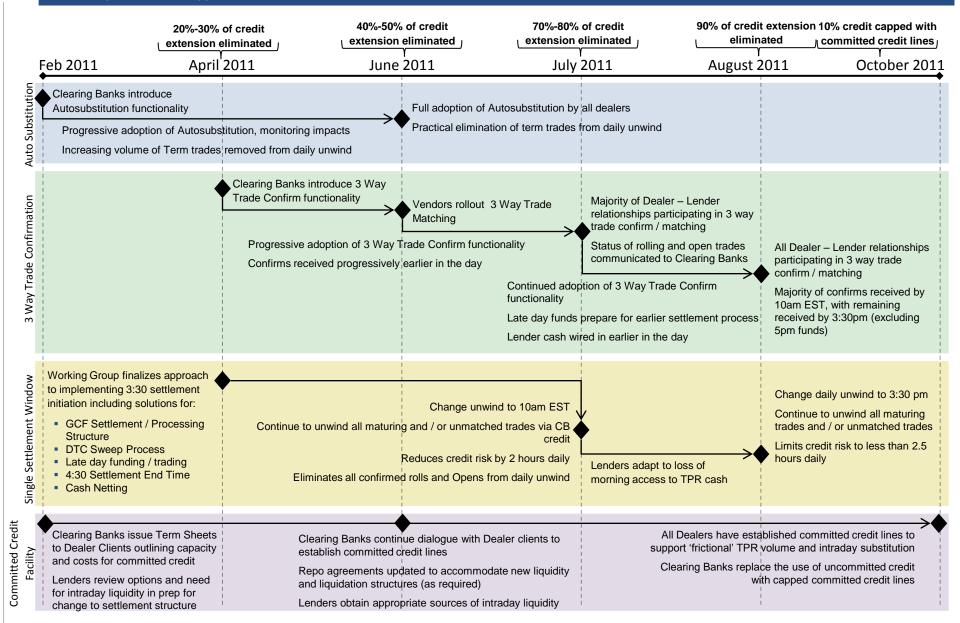
Settlement window shortened to 1 hour ending at 4:30pm (pending solution proposed in April 2011)

Ч

R O

Proposed Implementation Schedule: Timeline View

Phased Implementation Approach



۵

For Discussion Purposes Only

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

Questions for Public Comment

3 Way Trade Confirmation Process Proposal

- 1. What additional considerations are important as we execute the 3-way confirm process? Of specific interest, how various lender segments will confirm trades.
- 2. Specifically which additional fields, if any, are worth considering in order to for a repo trade to be considered successfully matched?
- 3. The document currently envisions a window from 7am 3:30pm to perform three-way trade confirmations. Task Force discussions have highlighted the potential benefits of earlier confirmations (e.g., by 10am), especially during stressful market conditions. Is it feasible to expect that the bulk of confirmations, including allocations, can be performed by 10 am, or if not, by some other time prior to 3:30? Would it be more feasible to set a target for confirmations without allocation detail by 10 am? Please indicate views on the relative benefits and costs of these alternatives.

3:30pm – 4:30pm Settlement Window Proposal

- 1. The document mentions the segment of lenders that close their funds at 5 pm, thereby making early allocations difficult. Which other characteristics of the settlement proposal will prove challenging to other lender segments?
- 2. What changes will dealers and lenders need to make as a result of the removal of the daily unwind?
- 3. What changes will need to be made in order to enable cash lenders to wire cash into clearing banks by 3:30?
- 4. How will lenders who may have become accustomed to early morning return of tri-party cash be able to source sufficient alternative intraday liquidity once the settlement window is changed to 3:30?

Implementation Timeline

- 1. What key risks to a phased implementation should the task force keep in mind?
- 2. Which specific implementation challenges to the 3-way trade confirm process should the task force keep in mind?
- 3. Which specific implementation challenges to the 3:30pm settlement time should the task force keep in mind?
- 4. Which specific implementation challenges to the committed credit facilities should the task force keep in mind?

۵.

For Discussion Purposes Only

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

FAQs - Investors

- 1. Will cash netting be required?
 - Yes, cash netting will be required at the account level (as a minimum requirement).

2. What will the new settlement timings be?

- There will be a settlement window between 3:30pm 4:30pm. Trades can still be submitted after this time, but it should be noted that time is needed to process after matching occurs by the clearing banks. Between 3:30pm 4:30pm, the first collateral allocation to new trades will occur, and payments, depending on the dealer having enough cash or secured credit line available, will start to be processed on maturing trades.
- 3. My cash management process relies on using maturing triparty cash throughout the day and then re-settling near end of day. Is that still an option? If not, what should I do?
 - A critical objective of the task force continues to be the practical elimination of intraday credit extended from clearing banks to dealers. As such, releasing
 maturity payments very early in the day, well before new funding comes back to the dealer and/or clearing bank will no longer be supported. Other forms of
 intraday credit, as needed, exist today or may be developed to accommodate market demand. If intraday cash is required by your firm, please speak with your
 dealer and / or clearing bank to understand what other options are available.
 - Note, there will be a two step approach in moving to the 3:30pm deadline in order to help investors get used to managing cash becoming available later in the day. The first stage will be to move the unwind process to 10am in July 2011, before moving to the 3:30pm deadline in August 2011. On the start of the trade, the cash needs to be with the clearing bank for 3:30pm, as a best practice. Cash will only be available to investors on maturity starting at 3:30pm, depending on the dealer having enough cash or secured credit line available to make payments.

4. Why is the taskforce not recommending two settlement times?

 As per the answer to question 3, a critical objective of the task force continues to be the practical elimination of intraday credit extended from clearing banks to dealers. As such, releasing maturity payments very early in the day, well before new funding comes back to the dealer and/or clearing bank will no longer be supported.

U P

FAQs – Investors

5. Why has the settlement time moved to 3:30pm - 4:30pm?

- The task force aimed to determine a settlement window to accommodate various constraints. In particular:
 - Setting the window LATE enough to:
 - Minimize the potential for large intraday credit extension from clearing banks to dealers
 - Allow for active intraday trading of securities until the Fedwire and DTC closes at 3:30pm
 - □ Coordinate with the GCF process
 - Allow cash investors time to submit fully allocated trade information
 - Setting the window EARLY enough to:
 - Allow for sufficient time to wire in/out funds prior to the close of the Money wire at 6:00pm, returning cash to investors as early as possible
 - Allow for sufficient time to perform any end of day cleanup or redistribution if required
 - Allow for sufficient time to locate alternative financing if planned trades fail
 - Ensure dealers have enough time to optimize collateral allocations / reallocations, and clearing banks have sufficient time to validate, as needed
 - Provide lenders with an opportunity to receive end of day collateral reports generally earlier in the business day

6. What if I need maturing cash earlier than 3:30pm on an infrequent basis?

- This will not be possible as part of the triparty program. Please speak with your dealer and / or clearing bank to understand what other options are available to you.

7. Will the collateral statements I receive from the clearing banks look different?

 Collateral statements will not be changing as a direct result of the taskforce initiatives. However, note that enhanced versions of collateral statements will soon be available, in addition to the current statements, due to other current industry initiatives.

8. What time will I get my final collateral statements?

- The expectation is that final collateral statements will generally be available earlier than the current model, however, the specific timings will be unique to each clearing bank, investor and dealer combination.

9. Now that I will have securities in my account throughout the day, will I be able to see the intra-day collateral allocations?

- Yes, tools will be available to see intra-day collateral allocations.

10. My funds do not close until 5pm, what are my options to get cash in late?

The taskforce recognizes that certain fund families close at 5pm, and therefore will be unable to provide sub-account breakdowns until approximately 5:15pm. Best practice is that over 90% of trades should be instructed and matched by 3:30pm, however, trades can still be submitted after this time, but it should be noted that time is needed to process after matching occurs by the clearing banks, and therefore, such funds should endeavor to instruct as soon as possible to reduce the risk of their trades not being matched.

11. First thing in the day, the attributes of securities are updated. If a security I have been allocated is no longer eligible for the trade, will there be a process in place to identify the ineligibility and substitute different collateral?

- Yes.

FAQs – Dealers

1. Will collateral allocated to GCF repo's unwind daily, and how will timing on GCF cash settlements change?

- There is a proposal currently being discussed whereby the GCF repo market will remain locked up, like all other triparty deals, until the 3:30pm settlement window. There has not been a final decision made in respect to this at the current point in time.

2. What is my credit line?

A dealer's triparty credit line will be agreed between dealers and their clearing bank. It will be a secured committed credit facility to be used for triparty activity.
 Please liaise with your clearing bank for more information.

3. What transactions will contribute to credit line usage?

 Only triparty related activity will contribute to credit line usage, e.g. securities removed from the triparty program where equivalent proceeds are not received (and where the difference is covered with substitution cash), and cash paid on maturing deals. Note: Replacing substitution cash with securities will decrease credit line usage.

4. What happens if I reach, or breach my secured triparty credit limit?

If the secured triparty credit limit is reached, all triparty activity resulting in additional credit extensions will be stopped until the dealer's credit position has been
improved. It will not be possible to breach the agreed credit line, however, on a case by case basis, a credit line extension could be negotiated between the
dealer and clearing bank.

5. Will I need to wait until the unwind process to have access to my securities?

No, dealers will be able to access their securities from first thing in the morning, and continuously throughout the day. Encumbered securities, taken from client trades, will be replaced with substitution cash or replacement securities. These cash substitutions can potentially result in an extension of credit and therefore will be subjected to the limits described above.

6. Will I be able to re-optimize my collateral allocations?

- Yes, the ability to re-optimize collateral allocations will be available.
- 7. Will I need to change my methodology for deliveries and/or receives to and from my clearing bank?
 - There will be no technical changes, however, there maybe some operational amendments required. Please liaise with your clearing bank for more information.

8. First thing in the day, securities are re-valued. Will I be required to 'top-up' trades that are no longer fully collateralized, and will I be able to release securities from trades that are over-collateralized?

- Yes, Dealers will be expected to allocate additional securities when a margin deficiency is identified in the morning. Likewise, dealers will have the ability to release excess collateral.

9. Will controls be in place to prevent securities that I have rehypothecated from being moved out of the triparty program to satisfy deliveries?

Yes.

۵

 \supset

FAQs – Deal Matching

- 1. Does this impact the deliverable / DVP?
 - No, these changes are specifically for the triparty repo / borrow pledge market.

2. What trades are in scope for trade matching?

All triparty transactions currently supported by the US clearing banks, Bank of NY Mellon and JPM Chase will be subject to the new trade matching process, including, but not limited to, repo and borrow pledge trades. If you are not sure if your specific trade(s) is impacted, please liaise with your clearing bank.

3. What are my options to send trade instructions to the clearing banks?

 There will be a number of different methodologies for trade communication, ranging from electronic communication solutions, to more manual web-based methodologies, as well as some third party vendor offerings. Please liaise with your clearing bank for further information on how they will be supporting this communication.

4. What happens if I do not get my trade instructions in by the start of the settlement cycle, i.e. 3:30pm?

 Best practice is that over 90% of trades should be instructed and matched by 3:30pm. Trades can still be submitted after this time, but it should be noted that time is needed to process after matching occurs by the clearing banks.

5. What happens if my trade is not matched at the end of the day?

- Trades that are not matched at the end of the day will not be processed by the clearing bank.

6. Will a partially matched trade settle?

 As per question DM 5, partially matched trades, i.e. trades that do not match on all required fields, will not be processed by the clearing bank. Note, in addition to the matching fields, there will be additional enrichment fields that will not be required to match.

7. Will there be any tolerances for any matching fields?

- No, all matching fields will need to match exactly.

8. Will there be any penalties if a trade fails, or if cash is not sent on time?

- The clearing banks do not have the authority to impose any penalties for fails, or late payments. That does not mean that future regulations/recommendations will not be published with respect to this. Note that the standard market practice for fails and associated claims will remain unchanged.

9. What happens if cash doesn't come in on a matched trade?

This process will not be changing from the current practice – the clearing bank will work with the dealer and investor in question to rectify the situation. However, if cash is still not received before the end of the day, the trade will fail. Note that the standard market practice for fails and associated claims will remain unchanged. Please liaise with your clearing bank, and / or counterparts for further information on this process.

۵.

FAQs – Deal Matching

10. What happens to cash that has been delivered by the investor that isn't the correct amount?

- If the amount received is too much, then the clearing bank will try to send cash back to the investor. If that is not possible, then the clearing bank will hold the cash on the behalf of the investor in a segregated account.

If the amount received is too little, then the clearing bank will work with both parties rebook the trade to the amount of cash received (if this is acceptable to both parties). Note that the standard market practice for fails and associated claims will remain unchanged. Please liaise with your clearing bank, and / or counterparts for further information on this process.

11. Will I need to confirm the final interest on a trade as part of the deal matching process?

- Final interest amount will not be a matching field. Today's practice with respect to interest confirmation and payments will remain unchanged please liaise with your clearing bank if you have any further questions on this process.
- 12. Why are three-way trade confirmations for repo trades being done at the point when the trade is allocated and not also being done at the block level when the trade is first transacted?
 - Repo trades are not in their final form at the block level, i.e. the legal entities on the Cash Investor side are not completely known.

13. What are the requirements for the initial match on trades with embedded options, for example, 7 day puts, evergreen trades, or other structures?

- There will be a requirement to match on certain fields relating to trade structures, e.g. to represent 7 day puts and evergreen trades, through the deal matching process. There will be two fields required to match for such trades:
 - □ "Structure Type" which specifically defines the structure options
 - Given the second of the second
- Please liaise with your clearing bank for further details on their process for this situation.

14. How do I handle trade cancellations and amendments?

- If a trade is not completely matched, details can be amended, or the trade can be outright cancelled, with unilateral instruction from the same entity who initially instructed the trade. If the trade is in a matched status the clearing banks will need matching instructions from both sides of the trade to perform any type of amendment*. If an amendment or cancellation is not confirmed by both sides of the trade, the pending action, amendment or cancellation, will not be affected and the prior matched state will be the one used by the clearing banks.
 - *There will be a limited number of exceptions that will not require confirmation from both sides of the trade, e.g. maturing an overnight trade, exercising a put / call option, closing out an open prior to 10am.
- Please liaise with your clearing bank for further details on their process for cancellations and amendments.

15. What is the definition of an open trade?

An open trade is a day to day trade that will continue until a party chooses to close it out. If a close out request by one or both parties is not received by either party by 10:00am the collateral in the trade will stay locked up. If a close out request by one or both parties is received by 10am the trade will mature in the settlement window. After 10am, a bilateral confirmation is needed to close out an open trade.

۵

 \supset

FAQs – Deal Matching

16. How do I book an open trade?

There will be a matching field that signifies an open trade. If this field is marked as 'Yes' on the trade instruction the trade will be considered an open trade. N.B.
 the maturity date received by the clearing banks on open trades will not be considered a matching field and will not be utilized for the deal creation in the clearing banks' systems.

17. If one party wants to mature an open trade, will unilateral instruction be sufficient?

- Yes, if provided by 10am, although best practice will be to receive matching instructions from both parties. After 10am, a bilateral confirmation is needed to close out an open trade.

18. If I have a trade booked versus a benchmark/variable rate (plus a spread), do I need to reconfirm the rate whenever the benchmark changes?

- No, this will not be required if only the benchmark changes, e.g. if a trade is booked with a rate of Libor + 10bps and Libor changes from 0.25 to 0.24, but the spread remains unchanged at 10bps - reconfirmation is not required.

19. Will I only receive collateral in line with the 'Collateral Type ID' the trade was matched on?

 No, although matching will be done using the high level 'Collateral Type ID', the actual allocation will adhere to the specific collateral agreed for the trade in question.

20. Will the clearing banks charge for this new matching service?

- Please liaise with your clearing bank for further details.

What can I do if I have further questions?

If you require any further information, please reach out to your clearing bank and / or dealer, or visit the website of the Tri-party Repo Infrastructure Reform Task Force (<u>http://www.newyorkfed.org/tripartyrepo</u>). In addition, there will be various presentations, panels and forums over the coming months.

۵

 \supset

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
3 Way Trade Confirm Workflow Supporting Details	
Glossary of Terms	32
Key Contacts	34
Operational Arrangements Working Group Membership	36

Appendix A: Rate Benchmarks

Benchmarks				
Code	Currency	Length	Calendar Unit	Example
LIBOR	USD	1, 2 or 3	W(eeks)	LIBORUSD2W
LIBOR	USD	1, 2,, or 12	M(onths)	LIBORUSD12M
EURBOR	USD	1, 2 or 3	W(eeks)	EUROBORUSD3W
EURBOR	USD	1, 2,, or 12	M(onths)	EUROBORUSD2M
EONIA				EONIA
SONIA				SONIA
LIBOR	USD	O(pen)	N(one)	LIBORUSDON
EURBOR	USD	O(pen)	N(one)	EURBORUSDON
FEDEFF				FEDEFF
FEDOPEN				FEDOPEN

GROUP

Appendix B: Collateral Type Identification Fields

18 High Level Collateral ID's:

- 1. ABS Investment Grade
- 2. ABS Non Investment Grade
- 3. Agency CMO's
- 4. Agency Debentures & Strips
- 5. Agency MBS
- 6. Convertible Bonds
- 7. CMO Private Label Investment Grade
- 8. CMO Private Label Non-Investment Grade
- 9. Corporate FDIC Guaranteed
- 10. Corporate Investment Grade
- 11. Corporate Non Investment Grade
- 12. Equities
- 13. Money Market Instruments
- 14. US Treasuries Excluding Strips
- 15. US Treasury Strips
- 16. Municipality Debt
- 17. Whole Loans/Trust Receipts
- 18. Any (defaults to collateral schedule)

- Example: If a Cash Investor enters into a TPR with Dealer X agreeing to Agency CMO collateral ID, the Dealer can provide any eligible Agency CMO or better collateral based on the underlying schedule. Dealer X could provide agency CMO, Treasury, Cash, etc. This is the same practice used in today's TPR market.
- To clearly standardize the Collateral ID field industry wide for TPR confirmation, normalization of the field description needs to occur. To accomplish this, the Group will request from the Cusip Bureau, unique cusip ID's for each Collateral ID.
 - Example: Agency CMO = 987654XXX1; CMO Private Label Investment Grade = 123456AAA1, etc.
- As the market evolves and new asset classes are introduced, the list of Collateral IDs may need to adjust.

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
	10
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34
	0-
Operational Arrangements Working Group Membership	36

Glossary of Terms

Glossary Of Terms

- <u>Account Allocations</u>: the buyer's legal entity as defined in the tri-party Repo contract and the account name that sits on the Clearing Banks books and records. Collateral received from TPR repo trades by the buyer must be placed in accounts at this legal entity level.
- <u>Capped Committed Credit Facility</u>: a structured secured committed line of credit, against a pre-defined set of eligible collateral with known margins and agreed cost structure. If provided by the Clearing Bank for TPR funding, the line will be capped to be no greater than 10% of the clients notional TPR volume with that Clearing Bank.
- Trade Maturation: the maturation of a trade will occur within the settlement window only upon the agreed true term date of the trade. Maturation requires the return of cash to the lender with cash supplied by the dealer sourced by clearance proceeds, TPR financing, or a pre-defined credit relationship. Trade maturation can not be supported via uncommitted, uncapped credit from Clearing Banks
- <u>Netting</u>: the submission/return of cash equal to the difference between the prior day's TPR trades and today's TPR trades (vs. the gross/total return of all maturing cash followed by the delivery of all the new invested cash). Netting can occur at the account level or at the firm level.
- Settlement Window: The settlement window signifies the period of time when new trades begin and maturing trades end. During this window the actual exchange of cash and collateral occurs and trades are locked down or matured.
- <u>3rd Party Vendors to support Trade Confirmation</u>: Currently 3 vendors have expressed interest in providing confirmation processing to the TPR Marketplace.
 - Omgeo
 - Bloomberg
 - TradeWeb

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Appendix	29
Glossary of Terms	32
Key Contacts	34

Operational Arrangements Working Group Membership

Key Contacts

Key Contacts

While we encourage you to submit comments directly to the Task Force mailbox at <u>tpr.reform@ny.frb.org</u>, if you have specific questions about the proposals, please feel free to reach out to any of the key contacts listed below.

Participant Type	Firm	Name	Tel #	Email	
Cash Investor	Federated Investors	Karl Mocharko	412-288-1975	kmocharko@federatedinv.com	
	Federated Investors	Al Morabito 412-288-8460		amorabito@federatedinv.com	
	Fidelity	Norm Lind	603-791-7794	norman.lind@fmr.com	
	Fidelity	Kevin Gaffney	603-791-5028	kevin.gaffney@fmr.com	
Clearing Bank	BNYMellon	Kevin Caffrey	212-635-4868	kevin.caffrey@bnymellon.com	
	BNYMellon	John Morik	212-635-4885	john.morik@bnymellon.com	
	JPMorganChase	Kelly Mathieson	212-623-5410	kelly.mathieson@jpmorgan.com	
	JPMorganChase	Mark Trivedi	212-623-6287	mark.d.trivedi@jpmorgan.com	
Dealer	Barclays Capital	Jim Hraska	212-320-0798	james.hraska@barclayscapital.com	
	Goldman Sachs	Brian Derby	212-357-6047	brian.derby@gs.com	
	Morgan Stanley	Ed Corral	212-761-1277	edward.corral@morganstanley.com	

	Page
Background / Scope / Key Assumptions	1
3 Way Trade Confirmation Workflow Proposal	5
Settlement Window Proposal	13
Implementation Timeline Proposal	16
Questions for Public Comment	20
Frequently Asked Questions	22
Trequentity Asked Questions	
Appendix	29
Glossary of Terms	32
Key Contacts	34

Operational Arrangements Working Group Membership

Operational Arrangements Working Group Members

Working Group Members

Firm	Name	Firm	Name	Firm	Name
Bank of America	Dick Seitz	Federated Investors	Al Morabito	Morgan Stanley	Ed Corral
Bank of America	Beth Ecton	Federated Investors	Jeff Petro	Morgan Stanley	Enrico Giardina
Bank of America	Joseph Johnston	Federated Investors	Karl Mocharko	Morgan Stanley	Michael Limeri
Barclays Capital	Bill Gallagher	Fidelity	Kevin Gaffney	Morgan Stanley	Thomas Wipf
Barclays Capital	Craig Jones	Fidelity	Norm Lind	RBC Capital Markets	David Attanasio
Barclays Capital	Daniel Fleming	Goldman Sachs	Brian Derby	RBC Capital Markets	James Connolly
Barclays Capital	James Hraska	Goldman Sachs	Karen Pontious	RBC Capital Markets	Tom Fredericks
Barclays Capital	Jim Beckenhaupt	Goldman Sachs	Michael Kurlander	RBS	Matthew Chasin
Barclays Capital	John Clifford	Goldman Sachs	Sean McWeeney	RBS	Michael Florio
Barclays Capital	John Feraca	Goldman Sachs	Simon Squire	RBS	Shawn Brosko
Barclays Capital	John Palchynsky	ICI	Brian Reid	State Street Global Advisors	Garrett Diggins
Barclays Capital	Peter Hadingham	Invesco	Brian Smith	State Street Global Advisors	Paul Doyon
BNYMellon	Charlie Austin	Invesco	Jacqueline Hakimzadeh	State Street Global Advisors	Sean Dillon
BNYMellon	Erika Lunceford	Invesco	Laurie Brignac	State Street Global Advisors	William Jurgelewicz
BNYMellon	James Malgieri	Invesco	Linda Felchak	UBS	Christian Rasmusser
BNYMellon	John Morik	Invesco	Sharon Lester	UBS	Emily Gu
BNYMellon	Kevin Caffrey	JPMorganChase	Brian Urkowitz	UBS	Jeffrey Scott
BNYMellon	Mark Robinson	JPMorganChase	Craig Delany	UBS	John Butler
Citadel Group	Colleen Hickey	JPMorganChase	Jason Minkler	UBS	Paul Ritchie
Citadel Group	Dan Dufresne	JPMorganChase	Kelly Mathieson	Vanguard	David Glocke
Citigroup	Gary Sanceverino	JPMorganChase	Mark Trivedi		
Credit Suisse	Larry Mahler	JPMorganChase	Michael P Albanese		
Credit Suisse	Tony Blasi	JPMorganChase	Ricardo Chiavenato		
DTCC	Elke Jakubowski	JPMorganChase	Thomas Russo		
DTCC	Gary Chan				
DTCC	Murray Pozmanter				