Fixed Income Clearing Corporation:

MBS Novation - MRO Changes Overview

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Version Control Page

Date	Version #	Name	Description of Change
04/28/2015	0.1 DRAFT	C. Swords	Initial version
07/17/2015	1.0	C. Swords	Made following changes: • Refer to FICC accounts as FTBA, FSPT and FSTI, rather than FICT, FICA and FICB. • Add details on how commission reflected in novation event • Provide details on addition of Trade Date as matching field on Pool Instruct • Provide details on "pool reference" number available on allocation message, to flow through to associated Pool Instruct Advisories. • Additional details on cash trade settlements • Renamed SPT and STIP Conversion MRO to Pool Conversion MRO, and add details on generic PIDs • Provide details on DNA terms, including trade date and original trade par. • No longer automatically purge uncompared trades after system-configured number of days. • Pool Netting Summary – add delivery date to filler • CCP Pool Instruct Activity – add trade date to filler and correction on activity code • CCP Uncompared – add trade date to filler • CCP Pool Obligation Activity – add trade date to filler and additional activity codes • CCP Compared Pool Instruct Status MRO – add trade date to filler • CCP Pool Obligation Pending Settlement / Status MRO – add trade date to filler • CCP Fail MRO – add trade date to filler • Added/Update Terminology and Acronyms • Other minor corrections
10/15/2015	1.01	C. Swords	Made following changes: • CCP Pool Instruct Activity - added EPN Pool Reference to filler • CCP Compared Pool Instruct - added EPN Pool Reference to filler • Updated selection criteria for expanded pool net to be "delivery date >= next business day" (previously, was noted as delivery date > next business day). • Added note that PID targeting TFTD/TBA and SBON is included in Pool Conversion file only if non-SIFMA CSD.
1/6/2016	1.02	C. Swords	Made following changes: • Section 2.3 EPN vs Pool Net Submissions - add footnote

Date	Version #	Name	Description of Change
			indicating that EPN Pool Reference may be set on both ON and CC replacement pools. • Section 2.6 SPT Trade Settlements - indicate SPT trades also converted during "cash trade conversion" process. • Section 2.8 DNA Settlement / TBA Reprice - updated DNA description updated to reflect ability to target specific trades • Section 3.1.3 Compressed OCR – add Original Trade Par to filler for both dealer and broker records; add trade sub-type and pool number to broker record. • Section 3.1.4 Purchase & Sale – new activity code RCRT will reflect replacement trade created due to the TBA Reprice process. • Miscellaneous cosmetic changes
7/4/2016	1.03	C. Swords	Made following changes: • Section 3.2.9 - Added Split/splice MRO • Section 2.8 DNA Settlement / TBA Reprice - Added variance TAP information • Section 3.2.6 TBA Reprice MRO - Added variance TAP information.
8/18/2016	1.04	C. Swords	Made following changes: • Section 2.1 Novation – correct FICT to be FTBA • Section 2.2 TBA Net – correct FICT to be FTBA • Section 2.7 Cash (Same-Day Settle) Trade Settlements – correct FICT to be FTBA • Section 3.1.3 Compressed OCR – corrected FICT to be FTBA. • Section 3.1.4 Purchase & Sale – corrected FICT to be FTBA. • Section 3.2.1 TBA Net Detail – corrected FICT to be FTBA.
5/5/2017	1.05	C. Swords	Made following changes: • Section 2.5 STIP Trades and Section 3.2.2 Pool Conversion – provide more details on PID to POID pool conversions occurring prior to delivery date.
6/26/2017	1.05	C. Swords	Made following changes: • Section 2.5 STIP Trades and Section 3.2.2 Pool Conversion – update to reflect bidlist conversion on "lot" level

Overview of MBS Novation

The mortgage-backed securities (MBS) Novation project is a conversion to operational novation and a simplification of the netting and settlement process that will enable us to eliminate inefficient processing such as NOS. It will expand and extend the services rolled out with Pool Netting, which introduced the comparison, trade guarantee, netting and CCP settlement of pool allocations submitted in satisfaction of members' outstanding to be announced (TBA) obligations. MBSD will continue to require bilateral matching and to support dealer-to-dealer and broker-to-dealer trade submission.

Changes to Machine Readable Output (MRO)

FICC has updated the existing TBA and Pool Net Machine Readable Output (MRO) available to support the MBS Novation initiative. All MRO was analyzed, and changes limited to minimize member-facing changes. The following document will walk through the new and updated business processes introduced with MBS Novation and the resulting impact to MRO. **Please note that this document only highlights the key changes to MRO and is not intended to be an exhaustive source of all changes.**

1 Overview

Throughout the business cycle, various processes are executed on TBA and pool allocations, and associated results are communicated to members through sets of MRO.

The table below summarizes the MRO sets, along with timing considerations and indication of any member-facing changes.

Time	MRO Output	Schedule	MRO Change?
7am	*RTTM Open*	Daily	
7am	*EPN Open*	Daily	
12:15pm	*EPN CC Cutoff*	Daily	
2pm	*Pool Net Cutoff*	Daily	
	Pool Netting Detail MRO	Daily	
	Pool Netting Summary MRO	Daily	Modified
3pm	*EPN ON Cutoff*	Daily	
	COB EPN Message Details MRO	Daily	
	COB EPN Message Summary MRO	Daily	
3pm	*Fedwire Cutoff*	Daily	
4pm	*TBA Net Cutoff*	SIFMA 72hr	
	TBA Net Detail MRO	SIFMA 72hr	New
	(SBO Summary MRO)	SIFMA 72hr	Obsolete
4pm	*AM Pass Cutoff*	Daily	
	Compressed Open Commitment MRO	Daily	Modified
	Open Commitment Summary MRO	Daily	
	Purchase & Sale MRO	Daily	Modified
	(Transaction Summary MRO)	Daily	Obsolete
	(Late Fees Detail MRO)	Daily	Obsolete
4:30pm	*EPN Close*	Daily	Modified (*)
	EOD EPN Message Details MRO	Daily	
	EOD EPN Message Summary MRO	Daily	
4:30pm	*DNA/Reprice/POID Conversion Cutoff*	Daily	New
	Pool Conversion MRO	Daily	New
	DNA Status MRO	Daily	New
	Expanded Pool Net Detail MRO	SIFMA 24hr	New
	Expanded Pool Net Summary MRO	SIFMA 24hr	New
	TBA Reprice and Variance TAP MRO	SIFMA 24hr	New
8pm	*RTTM Close*	Daily	
	(Open Commitment MRO)	Daily	Obsolete
	Compressed Open Commitment MRO	Daily	Modified
	Open Commitment Summary MRO	Daily	
	Purchase & Sale MRO	Daily	Modified
	Split/Splice MRO	Daily	New
	POID Factor Update MRO	Daily	New
	CCP Uncompared MRO	Daily	Modified

Time	MRO Output	Schedule	MRO Change?
	CCP Pool Instruct Activity MRO	Daily	Modified
	CCP Pool Obligation Activity MRO	Daily	Modified
	CCP Compared Pool Instruct Status MRO	Daily	Modified
	CCP Pool Obligation Pending Settlement / Status MRO	Daily	Modified
	CCP P&I MRO	Daily	
	CCP Fail MRO	Daily	Modified
	CCP Pool Instruct TAP Detail MRO	Daily	Modified
	Cash Trade (Same Day Settle) Conversion MRO	Daily	New
	(Transaction Summary MRO)	Daily	Obsolete
	(Late Fees Detail MRO)	Daily	Obsolete
	(FTS Reject MRO)	Daily	Obsolete
	Broker Commission MRO	Monthly	
	Dealer Commission MRO	Monthly	
	TMPG Monthly Recap MRO	Monthly	

(*) EPN Close was previously 5:30PM

1.1 Terminology and Acronyms

In the table below, various terms and associated definitions are described, as used throughout this document.

Name	Definition
Pool Net / Pool Comparison System	System which introduced the comparison, trade guarantee, netting and CCP settlement of pool allocations submitted in satisfaction of members' outstanding to be announced (TBA) obligations. While traditionally referred to as "Pool Net" System, this document uses the "Pool Comparison" portion of the application system, to highlight the fact that the system processes non-netting-eligible PIDs as well.
PID	Pool Instruct record representing a pool allocation. These are generated automatically by system as a result of member EPN submissions, or may optionally be submitted directly into Pool Comparison system by members. All PIDs will be converted to POIDs (see associated definition) for settlement, either through Pool Net, or Pool Conversion process.
Net Eligible PID	Pool Instruct that targets TFTD/TBA and SBON and meet criteria for netting. These PIDs will contribute to the net position determination and associated net algorithm, and result in POIDs vs FICC at system price.
Non Net Eligible PID	Pool Instruct that targets TFTD/TBA and SBON, however, they do not meet criteria for netting, e.g. PID targets trade with CSD in prior month, or late turn-around. These PIDs are excluded from the net algorithm and are directly converted to POIDs vs FICC at system price.
STIP PID	Pool Instruct that targets STIP trade. These PIDs are not eligible for netting, and are directly converted to POIDs vs FSTI at trade price.
POID	Pool Obligation record representing a pool settlement instruction, to be sent to Clearing Banks on associated delivery date for settlement
FTBA	Refers to FICC's novation account for TBA trades, i.e. novated SBOD and TFTD/TBA trades, and SBON obligations. When members allocate to TBA trades, the contra should be FTBA.
FICC	Refers to FICC's settlement account for allocations to TBA trades, i.e. TFTD/TBA and SBON. All POIDs resulting from Pool Net process will be versus FICC @ system price.
FSPT	Refers to FICC's novation and settlement account for SPT trades. All SPT trades will be converted to POIDs versus FSPT @ trade price.
FSTI	Refers to FICC's novation and settlement account for STIP trades and allocations. When members allocate to STIP trades, the contra should be FSTI and will result in POIDs versus FSTI at trade price.
NOS	Notification assigned to a TBA trade that a specific par has settled, either through allocation, DNA, reprice or pool conversion.
FICCNOS	A type of FICC-generated NOS created as a result of PID being processed through the pool net process (for TFTD/TBA and SBON allocations) or pool conversion process (for STIP allocations).
DNANOS	A type of FICC-generated NOS created as a result of a DNA request being settled.

Name	Definition
RPCNOS	A type of FICC-generated NOS created as a result of a TBA trade being settled due to reprice.
SPTNOS	A type of FICC-generated NOS created as a result of a SPT trade being settled due to conversion into Pool Obligation (POID).
System Price	Price used for TBA net, Pool Net and TBA repricing. This is equal to prior day close of business TBA CUSIP price.

2   MBS Novation Change Summary

The changes introduced with MBS Novation, as related to MRO output, are summarized in the following sections.

2.1   Novation

In the <u>current</u> system, member trades are submitted for bilateral matching and, once compared, must be settled versus a member-contra, either through FICC or away from FICC.

In the <u>new</u> system, member trades (excluding options) continue to be submitted for bilateral matching, but once fully compared, they are novated versus FICC and allocated appropriately.

To support this, various FICC accounts are used; a) FTBA becomes the counterparty on novated SBOD and TFTD/TBA, as well as the contra on SBON[1] out of the TBA net; b) FSTP becomes the counterparty on novated SPT trades, and c) FSTI becomes the counterparty on novated STIP trades.

As FICC replaces the counterparty on fully compared trades, including brokered trades, the associated give-up process is no longer necessary. When dealers submit trades with price inclusive of commission, the separation of price and commission, previously reported as part of give-up, will now be reported in the novated trade/event.

Note: options are no longer a valid trade type for brokers and are not subject to novation. They remain member-facing upon bilateral match.

2.2   TBA Net

In the <u>current</u> system, fully compared SBOD trades are subject to the TBA Net, which is run according to the SIFMA calendar. The TBA Net algorithm supports trades submit in GDM only and performs pair-offs in a given TBA CUSIP with both like and unlike contra-sides, resulting in 4 types of output; Netted, SBOO, SBON and NetOut trades. In addition, cash differential (type=SBD) is generated to account for the difference between SBOD trade price, and resulting trades price.

In the <u>new</u> novation system, the TBA Net will continue to run according to the SIFMA calendar and includes fully compared (and therefore novated) SBOD trades. The algorithm now supports trades submit in GDM as well as odd-lots and will result in SBON obligations versus FTBA priced at the TBA

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[1] SBOO are not generated as a result of the new TBA net algorithm.

CUSIP's "system price"[2]. A cash differential (type=TBA) will be generated to account for the difference between SBOD trade price and system price.

2.3 EPN vs Pool Net Submissions

In the current system, allocations subject to pool netting must be submitted through both EPN and the Pool Comparison system (also referred to as the Pool Net system). Allocations to STIP trades are settled away from FICC therefore not submit into Pool Net.

In the new novation system, all pool allocations will be submitted via EPN and automatically be fed to the Pool Comparison system, resulting in PID advisory from FICC. These advisories will be automatically matched on member-behalf at the end of the day (force-compared), unless the member pro-actively matches by submitting a corresponding PID (this is optional).

Note that in the new novation system, Trade Date has been added as a matching field on Pool Instructs, and as such, if members chose to submit PIDs for bilateral match, the trade date must accurately reflect the date as specified in the corresponding EPN allocation.

In addition, to assist in reconciliation between EPN allocations and PIDs, a reference number may be defined for each EPN pool allocation[3], which will be reflected in the corresponding matching PIDs, regardless on how the matching PIDs were generated (via force compare or bilateral match).   Through this reference number, members will be able to "link" EPN pool allocations to specific PIDs. Note that the pool reference is member-specified by sellers (as they submit into EPN), and generated by FICC for buyers (as FICC generates the EPN allocation for buyers).

These changes above apply to allocations targeting TBA trades (and therefore subject to netting), as well as allocations to STIP trades.

2.4 Daily Pool Net

In the current daily Pool Net cycle, all allocations (PIDs) targeting TBA trades (SBON and TFTD/TBA) with delivery date = next business day are submitted to the Pool Net system for processing. If these PIDs are netting-eligible, they are run through a netting process and result in pool obligations (POIDs) versus FICC at the system price, along with a cash differential[4] to account for the associated price differences. The corresponding TBA trade positions are drawn down by internal FICCNOS, and POIDs sent to the Clearing Banks for settlement on the next business day.   PIDs not netting-eligible[5] are settled away from FICC and FICC notified of settlement via member-submitted (external) NOS.

In the new novation system, all allocations will be settled through FICC. To support this, non netting-eligible PIDs will be automatically converted to POIDs versus FICC at system price and associated cash differentials (code=TAP) created to account for the price differences. As with all allocations, once

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[2] The TBA CUSIP "system price" is the prior day's EOD price, which is the same as the current day's pool net price.

[3] This includes ON as well as replacement pools in CC.

[4] The cash obligation code is "TAP".

[5] For example, PID targets trade with CSD in prior month, or late turn-around.

converted to a POID, the corresponding trade's position will be drawn down via the existing internal FICCNOS, and POIDs will be sent to the Clearing Banks for settlement on the delivery day.

2.5 STIP Trades

In the current system, there is no mechanism to distinguish STIP trades from generic TFTD/TBA trades; STIP trades are booked as generics and settled away from FICC, using external-NOS to notify FICC of settlement.

In the new novation system, all trades, including those with stipulations, will be settled though FICC.

To support this, a new TFTD sub-type "STIP" is introduced to identify that a TBA trade has stipulations attached. Pool allocations for these trades are submit via EPN in usual manner, but must identify the specific trade to target, using the RTTM-assigned Trade Id. As with all pool allocations, these will automatically be fed to the Pool Net system and result in associated PIDs, although STIP allocations are not subject to netting.

At 4:30pm on day before "lot-level" delivery date[6] on these PIDs, a STIP "Pool Conversion" process is run which will 1) automatically draw down the STIP trade open position using the existing internal FICCNOS and 2) automatically generate a corresponding POID versus FSTI at the trade's execution price. This POID will be sent to the Clearing Banks for settlement on the delivery day.

Note that in addition to converting STIP PIDs on delivery date -1 (or earlier) as described above, PIDs in a bidlist may also be converted to POIDs as part of CC processing when the bidlist is a mix of PIDs and POIDs (due to bidlist being submitted across multiple days and/or prior CC processing).

2.6 SPT Trade Settlements

In the current system, SPT trades are settled away from FICC and FICC notified of settlement via member-submitted (external) NOS.

In the new novation system, SPT trades will be settled through FICC.

To support this, a SPT Trade "Pool Conversion" process is run at 4:30pm on the day before a SPT trade's CSD. This process will 1) automatically generate a new kind of internal NOS, referred to as SPTNOS, to fully settle the SPT trade and 2) automatically generate one or more corresponding POIDs[7] versus FSTP at the trade's execution price. These POIDs will be sent to the Clearing Banks for settlement on CSD.

Note: SPT Trades are also subject to conversion during the "Cash Trade Conversion" process, as described in the following section.

2.7 Cash (Same-Day Settle) Trade Settlements

In the current system, cash trades booked for same day settlement are settled away from FICC.

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[6] STIP PIDs are converted at the "lot" level, meaning that all PIDs in a lot are converted at the same time; specifically, on the day before the minimum delivery date within the lot.

[7] The maximum par on SPT trade is 9,999,999,999.00, where as maximum par on POID is 50MM. Therefore, a single SPT trade may result in multiple a POIDs.

In the <u>new</u> system, members may submit SPT trades and allocations for same day settlement, and the system will automatically send these to the Clearing Banks for settlement.

To support this, SPT trades with CSD <= current business day that are matched on the current business day go through a "Cash Trade Conversion" process which converts these SPT trades to POIDs versus FSTP at the trade's execution price in real-time and immediately sends them to the Clearing Bank for settlement. In addition, SPT trades with CSD = next business day but submitted and matched <u>after</u> the 4:30pm "Pool Conversion" process is run (at 4:30pm) will also be converted to POIDs in the same manner, although these will not be sent to Clearing Banks for settlement until the next business day. As with all SPT trades, once converted to a POID, the corresponding SPT trade will be settled via internal SPTNOS.

In a similar manner, allocations submitted with delivery date = current business day[8] will be converted to POIDs at trade price in real-time and immediately sent to the Clearing Bank for settlement; for STIP allocations, these will be versus FSTI and for generics versus FTBA. As with all allocations, once converted to a POID, the corresponding trade's position will be drawn down via the existing internal FICCNOS.

2.8   DNA Settlement / TBA Reprice

In the <u>new</u> novation system, when members have two or more offsetting TFTD/TBA and/or SBON trades with the same TBA CUSIP and CSD, they may "pair-off" these positions and exclude them from the allocation process, thereby avoiding the need to make delivery of these pools. The process of identifying offsetting positions to exclude from allocation is called "Do Not Allocate (DNA)".

A DNA can be submit in 2 "modes"; a) **terms only mode** means members specify terms[10] of the buy/sell positions to target and RTTM® will select the specific trades to assign the DNA to; and b) **trade id mode** means members specify trade terms as well as <u>specific</u> trades to target.

DNA requests are "settled" on 24hr day at 4:30pm, meaning that the associated TBA position is marked as settled and cash obligations generated that are payable on CSD. To support the cash settlement of DNA requests, a secondary process called "Reprice" is employed which will reprice open trades (unallocated and not DNAed) to the system price and generate offsetting cash obligations, also payable on CSD. Note that prior to repricing, an "expanded" pool net cycle (in addition to the daily cycle) will be run that will process <u>all</u> allocations regardless of delivery date, thereby resolving all PIDs prior to the TBA reprice event. As part of these netting cycles on 24hr day, cash differences on the variance on all allocated positions is also determined and, combined with the reprice cash obligations, will support the DNA cash settlement.

2.8.1   DNA Processing

DNA requests may be submitted against trade positions from RTTM open on 48hr until the DNA Settlement process is run at 4:30pm on 24hr day. DNA requests may also be canceled during this

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[8] Members are required to notify MBS operations of intent to deliver the allocation same-day.

[10] The terms are TBA CUSIP, CSD, price and trade date.

period. DNA requests are submitted by terms and once validated, are assigned by the system to specific TBA trades (SBON or TFTD/TBA).

At 4:30pm on 24hr day, a "DNA Settlement" process is run which will 1) automatically generate a new kind of internal NOS, referred to as DNANOS, to settle down the targeted trade's position and 2) automatically generate a cash differential (code=DNA) to account for the associated price differences.

2.8.2   Expanded Pool Net Results

In order to prepare for the TBA Reprice process, an "expanded" Pool Net cycle is run which includes all allocations (PIDs) targeting SBON and TFTD/TBA trades with <u>delivery date >= next business day</u> and due to settle (CSD) on the next business day.

In same manner as daily Pool Net, PIDs that are netting-eligible will be run through a netting process and result in pool obligations (POIDs) versus FICC at the system price, whereas PIDs not netting-eligible[11] will directly result in POIDs, also versus FICC at system price. These obligations will be sent to the Clearing Banks for settlement on the associated delivery date. A cash differential (code=EXP) is created to account for the associated price differences.

2.8.3   Allocation Variance TAP

The cash obligations generated from the existing daily Pool Net (code=TAP) and expanded Pool Net cycle (code=EXP) are based on the current face of the pools, which may be slightly over/under the targeted position due to variance. A cash differential (code=VAR) is created to account for the associated price differences on this variance.

2.8.4   TBA Reprice

The TBA Reprice process is responsible for "repricing" open (failing) TFTD/TBA and SBON positions by closing (fully settling) the open trades and generating replacement ones at system price.

To support this, once the DNA Settlement and Expanded Pool Net processes have completed, the TBA Reprice process will 1) automatically generate a new kind of internal NOS, referred to as RPCNOS, to fully settle open trades, 2) automatically generate replacement trades at system price[12] and 3) create cash differentials (code=RPC) to account for the associated price differences.

2.9   Factor Update on POIDs

In the <u>existing</u> system, allocations targeting trades with CSD in the blackout period must be settled away from FICC.

In the <u>new</u> system, these allocations will result in POIDs generated assuming prior month factor. When the missing factor comes in, the system will cancel/rebook the POIDs (if POID not yet settled) or generate a cash adjustment (code=FAC) to account for the settlement value differences (if POID settled).

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[11] For example, PID targets trade with CSD in prior month, or late turn-around.

[12] The member-provided XREF and trade terms will be maintained; a new Trade Id will be assigned.

2.10 TFTD Trade Type Details

In the <u>existing</u> system, generic TBA and SPT trades are both booked as types of TFTD, with sub-type (TBA or SPT) and pool number used to distinguishing between them. However, in the existing MRO, this sub-type and associated pool number is not provided.

In the <u>new</u> system, full details on STP trades, as well as STIP trades, will be provided in appropriate MRO (for dealers only). This information may be used to distinguish between types of TFTD – specifically, identify which trades are STIP and therefore require the associated RTTM-assigned Trade Id to be included during allocation.

The MRO affected are Compressed OCR and Purchase & Sale MRO.

2.11 Open Commitment MRO Consolidation

In the <u>existing</u> system, 3 versions of the Open Commitment MRO are produced; the Summary OCR provides totals for a members open commitments; the Compressed OCR provides essential trade details along with the summary information; and the Full OCR provides these same details with additional trade data and settlement (NOS) detail.

In the <u>new</u> Novation system, all settlements occur through FICC and as such, member-submitted NOS is no longer supported (internal NOS still exists). With the elimination of member submitted NOS, and a desire to streamline MRO output, the three OCR versions will be reduced to two.

Specifically, the Compressed OCR will be enhanced to include broker commissions (previously provided in Full OCR only), as well as SPT and STIP trade details (see SPT/STIP Type Identification). The Full OCR will be eliminated[13], noting that details on NOS may be continue to be extracted from the P&S on the day the NOS was generated, if desired. The Summary OCR is unchanged.

3   Impacted MRO Output Details

In this section, details of MRO affected by the MBS initiative are detailed. MRO not included are unchanged from current day processing.

3.1   Modified MRO

3.1.1   Pool Netting Detail

Purpose	Reflect the results of the current day's pool netting cycle in detail, including netting eligible and non netting eligible PIDs as well as resulting POIDs versus FICC @ system price.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	2pm		
Layout Changes	None		

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[13] *Though obsolete for novation, this MRO will not be removed until all member-member trades processed under the existing rules reach end-of-life (either canceled or fully-settled).*

Content Changes	This existing report show results of daily net, which includes all netting eligible PIDs targeting TBA trades (TFTD/TBA and SBON), resulting in POIDs versus FICC @ system price.
	In addition to reflecting netting eligible PIDs and resulting POIDs as processed through the net algorithm (as done today), this output will include PIDs targeting these TBA trades, but <u>not</u> netting eligible[14] (e.g. excluded from the net) along with resulting POIDs.
	Specifically:
	• Each non netting eligible PID processed will be reflected via Pool Instruct Detail Record (card Code 03)
	• Each resulting POID generated will be reflected via Pool Obligation Detail Record (card Code 04)

3.1.2   Pool Netting Summary

Purpose	Reflect the results of the current day's pool netting cycle in summary, including netting eligible and non netting eligible PIDs.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	2pm		
Layout Changes	Following layout changes are made: Pool Instruct Detail Record (CC=02) Using space in "filler" record, add: • Delivery Date		
Content Changes	This existing report show results of daily net in summary, which includes all netting eligible PIDs targeting TBA trades (TFTD/TBA and SBON). In addition to reflecting summary of netting eligible PIDs processed through the net algorithm (as done today), this output will include PIDs targeting these TBA trades, but <u>not</u> netting eligible[15] (e.g. excluded from the net).		

3.1.3   Compressed Open Commitment

Purpose	Condensed listing of all open trades.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	2pm and 8pm		
Layout Changes	Following layout changes are made: Modify Dealer Detail Record (CC=03)		

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[14] For example, PID targets trade with CSD in prior month, or late turn-around.

[15] For example, PID targets trade with CSD in prior month, or late turn-around.

<table>
<tr><td></td><td>Using space in "filler" record, add:
• Commission
• Trade Sub-Type (for TFTD only, can be TBA, SPT or STIP)
• Pool Number (for SPT only)
• Original Trade Par

Modify Broker Detail Record (CC=07)
Using space in "filler" record, add:
• Selling Dealer Commission
• Buying Dealer Commission
• Trade Sub-Type (for TFTD only, can be TBA, SPT or STIP)
• Pool Number (for SPT only)
• Original Trade Par</td></tr>
<tr><td>Content Changes</td><td>Following changes will be reflected.

Dealer Detail Record (CC=03)
• Give-Up Date obsolete, will be blank
• Contra will be FTBA, FSTP or FSTI upon novation, as appropriate
• SBON will be vs. FTBA, @ system price and can be odd-lot
• SPT can be FSET due to real-time cash SPT Conversion[16]. If FSET, trade will not appear in following version.

Broker Detail Record (CC=07)
• Give-Up Date obsolete, will be blank
• Trade Type can no longer be OPTN</td></tr>
</table>

3.1.4 Purchase & Sale

Purpose	The Purchase and Sale Report serves as the sole binding confirmation of all matched trades. It also reports any subsequent activity associated with a trade i.e., novation, cancel, settle, etc.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	4pm and 8pm		
Layout Changes	Following layout changes are made: Modify Dealer Detail Record (CC=03) Using space in "filler" record, add: • Trade Sub-Type (for TFTD only, can be TBA, SPT or STIP) • Pool Number (for SPT only)		
Content Changes	Following changes will be reflected.		

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[16] This only occurs when member submit/match SPT with CSD<=today; it is immediately settled via SPTNOS and converted to POID.   This is 1st time FSET seen in AM Pass report, as NOS previously EOD event only.

	Dealer Detail Record (CC=03)
	• Activity Type GUP obsolete
	• Activity Type NOV is new, and reflects trade novation
	• Activity Type RCRT is new, and reflects a replacement trade generated due to the TBA Reprice process.
	• Give-Up Date obsolete, will be blank
	• Contra will be FTBA, FSTP or FSTI upon novation, as appropriate after novation
	• SBON will be vs. FTBA, @ system price and can be odd-lot
	• SPT can be FSET due to real-time SPT Conversion[17].
	Settlement Record (CC=05)
	• Control Number/Internal XREF can be DNANOS, RPCNOS or SPTNOS[18]
	• Pool Number will be equal to dummy NOS value (999999) for DNANOS and RPCNOS; will be equal to pool on SPT trade for SPTNOS. NOS due from STIP or non-net eligible PIDs will have FICCNOS as today.
	• *Note: DNANOS and RPCNOS will appear in PM version only*
	Broker Detail Record (CC=07)
	• Give-Up Date obsolete, will be blank
	• Trade Type can no longer be OPTN

3.1.5   CCP Uncompared

Purpose	Reflect uncompared pool submissions.
Frequency	☒Daily ☐Monthly ☐Per SIFMA Calendar
Schedule	☒Daily ☐Last Day of Month ☐48hr ☐ 24hr
Time	8pm
Layout Changes	Following layout changes are made: Uncompared Pool Submission Detail Record (CC=02) Using space in "filler" record, add: • Trade Date
Content Changes	This existing output shows pool instructs submitted by members that did not bilaterally match against an advisory. Note: The terms for bilateral match have been expanded to include Trade Date. Previously, this output also reflected the DK code on any member instructs that were DKed by the counterparty; as all instructs are now versus FICC, this DK code field is now obsolete and will no longer be populated/used.

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[17] This only occurs when member submit/match SPT with CSD<=today; it is immediately settled via SPTNOS and converted to POID.   This is 1st time FSET seen in AM Pass report, as NOS previously EOD event only.

[18] As member can no longer submit external NOS, control number values will only be FICCNOS, DNANOS, RPCNOS or SPTNOS.

3.1.6   CCP Pool Instruct Activity

Purpose	Reflects newly compared Pool Instructs and all subsequent updates.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	8pm		
Layout Changes	Following layout changes are made: Pool Instruct Activity Item Detail Record (CC=02) Using space in "filler" record, add: • Trade Date • EPN Pool Reference Number		
Content Changes	Following changes will be reflected. Pool Instruct Activity Item Detail Record (CC=02) New Activity Codes, as follows: • FCMP - Force compare member advisory • MFYD – Delivery date change • PNCV – Non netting eligible PID converted to POID • PDCV – STIP PID converted to POID Following codes no longer used: • XNET – PID excluded from netting The new Trade Date field will be populated with the Pool Instruct trade date.		

3.1.7   CCP Pool Obligation Activity

Purpose	Reflects creation of and all subsequent updates to Pool Obligation (POIDs) level positions		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	8pm		
Layout Changes	Following layout changes are made: Pool Obligation Activity Item Detail Record (CC=02) Using space in "filler" record, add: • Trade Date		
Content Changes	Following changes will be reflected. Pool Obligation Activity Item Detail Record (CC=02) New Activity Codes, as follows: • PNCV – POID generated from conversion of non netting eligible PID • PDCV – POID generated from conversion of STIP PID • STCV – POID generated from conversion of SPT PID • CXFC – POID cancel via factor update • REFC – Replacement POID via factor update • CXDK – POID cancel due to DK of CC		

	• REDK – Original POID restored due to DK of CC
	The Trade Date field is new and will be populated differently based on FICC account:
	• FSTP (SPT trades): Trade Date will reflect the associated SPT trade date
	• FSTI (STIP allocations): Trade Date will reflect the associated STIP trade date.
	• FICC (generic TBA trade allocations): Trade Date will be blank

3.1.8   CCP Compared Pool Instruct Status

Purpose	Reflect all Pool Instruct positions and their current state.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	8pm		
Layout Changes	Following layout changes are made: Compared Pool Instruct Detail Record (CC=02) Using space in "filler" record, add: • Trade Date • EPN Pool Reference Number		
Content Changes	This existing output shows a member's compared pool instructs, and will now reflect the Trade Date, which has been added as a matching term.		

3.1.9   CCP Pool Obligation Pending Settlement / Status

Purpose	Reflect all pool obligations that are pending settlement, settled or canceled on the current business day.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	8pm		
Layout Changes	Following layout changes are made: Pool Obligation Pending Settlement Detail Record (CC=02) Using space in "filler" record, add: • Trade Date		
Content Changes	This existing output shows pool obligations pending settlement, including those generated from pool netting, SPT trade conversion and STIP allocations. The Trade Date field is new and will be populated differently based on FICC account: • FSTP (SPT trades): Trade Date will reflect the associated SPT trade date • FSTI (STIP allocations): Trade Date will reflect the associated STIP trade date. • FICC (generic TBA trade allocations): Trade Date will be blank.		

3.1.10 CCP Fail

Purpose	Reflect all failing pool clearance obligations versus FICC (delivery date = report date)		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	8pm		
Layout Changes	Following layout changes are made: Pool Obligation Fail Detail Record (CC=02) Using space in "filler" record, add: • Trade Date		
Content Changes	This existing output shows pool obligations with delivery date = today, but failed to settle. The Trade Date field is new and will be populated differently based on FICC account: • FSTP (SPT trades): Trade Date will reflect the associated SPT trade date • FSTI (STIP allocations): Trade Date will reflect the associated STIP trade date. • FICC (generic TBA trade allocations): Trade Date will be blank.		

3.1.11 CCP Pool Instruct TAP Detail

Purpose	Reflect all compared Pool Instructs processed in the current business day's Pool Netting cycle and the associated Transaction Adjustment Payment for each individual Pool Instruct.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐48hr ☐ 24hr
Time	8pm		
Layout Changes	None		
Content Changes	This existing report show netting eligible PIDs processed through the daily net, along with associated pool TAP. In addition to reflecting netting eligible PIDs (as done today), this output will now include the following: • PIDs processed through the daily net, but not netting eligible • PIDs, regardless of netting eligibility, processed through the Expanded Pool Net (on SIFMA 24hr day only) All of these PIDs result in POIDs @ system price and therefore have associated TAP. Each PID above will be reflected via Pool Instruct TAP Detail Record (CC=02).		

3.2 New MRO

3.2.1 TBA Net Detail

Purpose	Display details about TBA Net – including SBOD trades included in the SBO process along with corresponding TBA TAP, and resulting SBON obligations versus FTBA @ system price.		
Frequency	☐Daily	☐Monthly	☒Per SIFMA Calendar
Schedule	☐Daily	☐Last Day of Month	☒72hr ☐ 24hr
Time	4pm		
Description	Reflects results of TBA Net, which includes SBOD trades into the net, associated TBA TAP and resulting SBON obligations versus FTBA @ system price.		

3.2.2 Pool Conversion

Purpose	Reflect SPT and allocations (STIP and generic TBA) converted to POIDs @ trade execution price on the current business day.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐72hr ☐ 24hr
Time	4:30pm		
Description	Reflects all SPT trade and allocations that were converted to POIDs @ trade price on the current business day. This includes: • **SPT Trade**: SPT trades with CSD = next business day converted to one or more POIDs versus FSTP @ trade price[19]. • **STIP Allocations**: PIDs targeting STIP with "lot-level" delivery date[20] = next business day converted to POID versus FSTI @ trade price. • **Generic PID**: PIDs targeting TFTD/TBA or SBON with delivery date = next business day that missed the daily Pool Net cycle[21] and converted to POID vs FICC @ trade price. This is applicable to PIDs with non-SIFMA CSD[22] only.		

3.2.3 Expanded Pool Net Summary

Purpose	Reflects the summary results of the current day's expanded pool netting cycle, run as part of DNA/Reprice.		
Frequency	☐Daily	☐Monthly	☒Per SIFMA Calendar
Schedule	☐Daily	☐Last Day of Month	☐72hr ☒ 24hr
Time	4:30pm		
Description	Provides summary results of Expanded Pool Net, which includes all allocations (PIDs) with delivery date >= next business day, associated cash differential		

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[19] The maximum par on SPT trade is 9,999,999,999, where as maximum par on POID is 50MM. Therefore, a single SPT trade may result in multiple a POIDs.

[20] STIP PIDs are converted at the "lot" level, meaning that all PIDs in a lot are converted at the same time; specifically, on the day before the <u>minimum</u> delivery date within the lot.

[21] This can occur due to operations DD update, or processing of DK on pre-net CC.

[22] If the PID targeted a SIFMA CSD, the PID would be picked up by the Expanded Pool Net, which includes all PIDs with DD >= next business day.

(code=EXP) and resulting POIDs versus FICC @ system price. Note: This MRO will be in same format as daily Pool Net Summary MRO.	

3.2.4 Expanded Pool Net Detail

Purpose	Reflects the detailed results of the current day's expanded pool netting cycle, run as part of DNA/Reprice.		
Frequency	☐Daily	☐Monthly	☒Per SIFMA Calendar
Schedule	☐Daily	☐Last Day of Month	☐72hr ☒ 24hr
Time	4:30pm		
Description	Provides detailed results of Expanded Pool Net, which includes all allocations (PIDs) with delivery date >= next business day, associated cash differential (code=EXP) and resulting POIDs versus FICC @ system price. Note: This MRO will be in same format as daily Pool Net Detail MRO.		

3.2.5 DNA Status

Purpose	To capture the DNA requests sent by members. This report will allow members to track their DNA activity and reconcile money differences generated by the pair offs.		
Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐72hr ☐ 24hr
Time	4:30pm		
Description	This output will reflect all DNA requests active in the system or processed / canceled on the current business day. For each DNA request, it will show the DNA status, the individual trades that FICC has assigned the DNA request to[23] and any associated money differences (DNA TAP). The members may use this report to reconcile their DNA activity and settlement value differences.		

3.2.6 TBA Reprice and Variance TAP

Purpose	Capture the TBA trade reprice activity occurring on the current business day. This report will allow members to reconcile this reprice activity and any associated money differences. In addition, capture cash differences associated with allocation variance, allowing members to reconcile these money differences.		
Frequency	☐Daily	☐Monthly	☒Per SIFMA Calendar
Schedule	☐Daily	☐Last Day of Month	☐72hr ☒ 24hr
Time	4:30pm		

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[23] DNA requests are submit by members based on "terms" and it is the responsibility for FICC to select specific buy and sell trades to assign the DNA request to.

Description	This output will reflect the following:
	1) All TBA reprice activity, including original and replacement trade information as well as associated cash differential.
	2) Variance TAP calculated due to allocations from both daily and expanded pool net cycles.

3.2.7   POID Factor Update

Purpose	Capture cash differences due to factor updates for POIDs that already settled and have CSD in blackout period. This report will allow members to reconcile the money differences based on the factor updates
Frequency	☒Daily ☐Monthly ☐Per SIFMA Calendar
Schedule	☒Daily ☐Last Day of Month ☐72hr ☐ 24hr
Time	8pm
Change Description	This output will reflect all settled POIDs that incurred settlement value differences due to factor update.

3.2.8   Cash Trade (Same Day Settle) Conversion

Purpose	Provide details on cash trades (SPT and allocations) converted to POIDs on real-time basis.
Frequency	☒Daily ☐Monthly ☐Per SIFMA Calendar
Schedule	☒Daily ☐Last Day of Month ☐72hr ☐ 24hr
Time	8pm
Change Description	This output reflects following cash trades converted to POIDs @ trade price on real-time basis. • **Same-Day Generic PID**: PID targeting TFTD/TBA or SBON with DD=today submitted on current business day result in POIDs vs FICC @ trade price • **"As-of" SPT**: SPT trade with CSD<=today submit on current business day result in POIDs vs FSTP @ trade price • **Same-Day STIP PID**: PID targeting STIP with DD=today submitted on current business day result in POIDs vs FSTI @ trade price These cash trades will result in POID and sent to Clearing Bank for immediate settlement. If settled, POID will reflect settled; else will reflect pending with DD rolled to next business day. This output will also include SPT trades with CSD = next business day that were submitted and matched <u>after</u> the 4:30pm "SPT Trade Conversion" process is run (at 4:30pm). They result in POID that will be sent to the Clearing Banks for settlement on the next business day.

3.2.9   Split/Splice MRO

Purpose	This output identifies dealer trades matched as a result of Net Position match (a.k.a. Net Position Match), allowing members to reconcile this activity.

Frequency	☒Daily	☐Monthly	☐Per SIFMA Calendar
Schedule	☒Daily	☐Last Day of Month	☐72hr ☐ 24hr
Time	8pm		
Change Description	This output will reflect all split/splice match events occurring on the current business day, including the original dealer trades cancelled and resulting replacement trades generated.		

3.3   Obsolete MRO

Following output currently produced is now obsolete.

- SBO Summary (replaced by TBA Net Detail) (*1)
- Full Open Commitment (OCR) (*2)
- Transaction Summary (*2)
- Late Fees Detail (*2)
- FTS Reject (*2)

*(*1) Though obsolete for novation, this MRO can not be removed until all TBA CUSIP enabled for novation*

*(*2) Though obsolete for novation, this MRO can not be removed until all member-member trades processed under the existing rules reach end-of-life (either canceled or fully-settled).*