This Service Description is provided as a convenience to members and is for informational purposes only. The specific processes and services referenced in this Service Description are subject to the U.S. Securities and Exchange Commission’s approval of the Clearing Rules of the Mortgage-Backed Securities Division (“MBSD”) of the Fixed Income Clearing Corporation (“FICC”).

This Service Description should not be regarded as a definitive or exhaustive description of FICC/MBSD’s services or risk-management framework; nor should it be regarded as a substitute for the Clearing Rules, which govern in all respects, the relationship between FICC/MBSD and its members. In all cases, members should refer to the Clearing Rules for a complete statement of FICC/MBSD procedures, obligations, and requirements. Nothing in this Service Description shall be deemed to impose any obligations on FICC/MBSD that are not set forth in the Clearing Rules, and in the case of any discrepancy between this Service Description and the Clearing Rules, the Clearing Rules shall govern. The services and risk-management practices described in this Service Description may be amended at any time without prior notice.
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Definitions

**48hr day** The day two days prior to the contractual settlement date of the trade where the allocation process typically begins.

**Account** The term "Account" means any account maintained by the Corporation on behalf of a Clearing Member. An Account maintained for a Member acting as a Dealer is referred to as a "Dealer Account," and an Account maintained for a Member acting as a Broker is referred to as a "Broker Account."

**Aggregate ID** The term "Aggregated ID" means an alphanumeric identifier used to link a set of Accounts linked to an aggregate ID for the processing Members’ Cash Settlement obligations and Mark-to-Market ("MTM") requirements on a net basis.

**Allocation** The process where a buyer is notified by a seller which pool numbers will be delivered against to satisfy a TBA trade.

**Broker** The term "Broker" means a Member that is in the business of buying and selling securities as agent on behalf of Dealers.

**Business Day** The term "Business Day" means any day on which the Corporation is open for business.

**Clearance Date** The term "Clearance Date" means the date on which the parties to a Transaction actually deliver and pay for Eligible Securities as reported to the Corporation, which may be a date other than the Contractual Settlement Date.

**Compared Trade** The term "Compared Trade" means a trade the data on which has been compared or deemed compared by the Corporation.

**Contractual Settlement Date** The term "Contractual Settlement Date" means the settlement date mutually agreed to by the parties to the Transaction.

**Corporation** The term "Corporation" means the Fixed Income Clearing Corporation, the owner of the Mortgage-Backed Securities Division.

**CUSIP Number** The term "CUSIP Number" means the Committee on Uniform Securities Identification Procedures identifying number for an Eligible Security.

**Customer Delivery Request** The term “Customer Delivery Request” ("CDR") means an input by the member to prevent a netting destined trade or pool instruct from being included in the net position.

**Dealer** The term "Dealer" means a Member that is in the business of buying and selling Securities as principal, either directly or through a Broker.

**Delivery Date** The term "Delivery Date" means the earliest date on which pools can be delivered in satisfaction of a trade, as per mutual agreement between buyer and seller.

**DK** The term "DK" means a statement submitted to the Corporation by a Member that the Member "does not know" (i.e., denies the existence of) a Transaction or allocation reported to the Member by the Corporation.
**EPN Service**  The term “EPN Service” means the Corporation’s electronic pool notification service that enables EPN Users to electronically communicate pool information to other EPN Users, as described in the Corporation’s EPN Rules and EPN procedures.

**Fail**  The term "Fail" means a Transaction the clearance of which has not occurred or has not been reported to the Corporation as having occurred on the Contractual Settlement Date, or expiration date, as applicable.

**FedWire**  The term "FedWire" means the Federal Reserve Wire Transfer System for securities movements or for funds-only movements, as the context requires.

**Fully Compared**  The term "Fully Compared" means that trade input submitted by a Broker matches trade input submitted by each Dealer on whose behalf the Broker is acting or a dealer versus dealer match.

**Interactive Submission Method**  The term “Interactive Submission Method” means a trade submission method that is used to submit data on individual trades to the Corporation immediately after trade execution pursuant to communications links, formats, timeframes, and deadlines established by the Corporation for such purpose.

**Mark-to-Market**  The term “Mark-to-Market” means the aggregate amount of a Member’s profits and losses calculated by the Corporation.

**Member**  The term "Member" means any entity accepted into membership in the Mortgage-Backed Securities Division.

**Mortgage-Backed Securities Division**  The term “Mortgage-Backed Securities Division” means the division of the Fixed Income Clearing Corporation that provides services related to mortgage-backed securities Transactions.

**Multiple Batch Submission Method**  The term "Multiple Batch Submission Method" means a trade submission method that is used to submit multiple batches of trade data to the Corporation throughout the day pursuant to communications links, formats, timeframes, and deadlines established by the Corporation for such purpose.

**Notification of Settlement**  The term "Notification of Settlement" means an instruction submitted to the Corporation by a purchasing or selling Clearing Member reflecting settlement of an SBO Trade, Trade-for-Trade Transaction or Specified Pool Trade.

**Novation**  The term "Novation" means the action by the Corporation to terminate deliver, receive, and related payment obligations between Members and replace them with similar obligations to and from the Corporation.

**Option Contract**  The term "Option Contract" means an option to sell or buy a specified amount of Eligible Securities by or on a specified date to or from the other party to the contract against payment of the Strike Price.

**Pair Off**  The term “Pair off” means an action submitted by a member to ensure that a trade is included in the end of day netting process and is excluded from the allocation process.

**Par Amount**  The term "Par Amount" means for Trade-for-Trade and SBO Transactions, Option Contracts and Pool Deliver and Pool Receive Obligations, the current face value of a Security to be delivered on the Contractual Settlement Date.  With respect to Specified Pool Trades, “Par Amount” shall mean the original face value of a Security to be delivered on the Contractual Settlement Date.

**Partially Compared**  The term "Partially Compared" means that trade input submitted by a Broker matches trade input submitted by one but not both of the Dealers on whose behalf the Broker is acting in accordance with the
Match Mode.

**Pool Netting** The term “Pool Netting” means the service provided to Clearing Members, as applicable, and the operations carried out by the Corporation in the course of providing such service in accordance with Rule 8.

**Single Pot Margining** Analysis of the members book for risk management purposes across multiple accounts, participant ID’s and/or divisions

**Report** The term "Report" means any document, record, or other output prepared by the Corporation and made available to a Member in any format (including, but not limited to, machine-readable and print-image formats) or medium (including, but not limited to, print copy, magnetic tape, video display terminal, and interactive message formats) that provides information to such Member with regard to the services provided by, or the operations of, the Corporation.

**Security** The term "Security" shall have the meaning given that term in the Exchange Act and the rules and regulations thereunder. The term "Securities" shall mean more than one Security.

**Settlement Balance Order Destined** The term "SBO-Destined Trade" means a TBA transaction in the Clearing System intended for TBA Netting in the current system. This trade matching type will be retired under the MBS Novation project.

**SIFMA Guidelines** The term "SIFMA Guidelines" means the guidelines for good delivery of Mortgage-Backed Securities as promulgated from time to time by The Securities Industry and Financial Markets Association.

**Specified Pool Trade** The term “Specified Pool Trade” means a trade in which all required pool data, including the pool number to be delivered on the Contractual Settlement Date, are agreed upon by Members at the time of execution.

**Stipulated Trade** The term “Stip Trade” means a trade in which pools allocated and delivered against it must satisfy certain conditions that are agreed upon by Members at the time of execution.

**System** The term "System" means a set of specific services provided by the Corporation to Members which elect and are qualified to avail themselves of such services. The term encompasses the Clearing System, and any other System established from time to time.

**System Price** The term “System Price” means the price for any trade or any Pool Deliver or Pool Receive Obligation not including accrued interest, established by the Corporation on each Business Day, based on current market information, for each Eligible Security.

**TBA Netting “TNET”** The process where FICC offsets buy and sell compared trades to generate a single TBA net position by TBA CUSIP and by contractual settlement date. This replaces SBO processing and the SBOD trade type.


**Tier One Member** The term “Tier One Member” means a Clearing Member whose membership category has been designated as such by the Corporation pursuant to Rule 2A for loss allocation purposes.

**Tier Two Member** The term “Tier Two Member” means a Clearing Member whose membership category has been
designated as such by the Corporation pursuant to Rule 2A for loss allocation purposes.

**Trade Comparison** The term “Trade Comparison” means the service provided to Clearing Members and the operations carried out by the Corporation in the course of providing such service, in accordance with Rule 5.

**Trade-for-Trade Transaction** The term “Trade-for-Trade Transaction” means a TBA, SPT or Stip Transaction submitted to the Corporation not intended for TBA Netting.

**Transaction** The term “Transaction” means a trade that is eligible for processing by the Corporation.

**Trade Instruct** The term “Trade Instruct” means a submission entered by a member to MBSD for processing by the Corporation.
Mortgage Novation Service Description

1. Background

The Mortgage Novation project (referred to as TBA Netting and Novation in earlier publications) is the culmination of FICC’s effort to develop a full central counterparty (CCP) netting and novation model for its Mortgage Backed Securities (MBS) trade management services. It expands and extends the services that will be rolled out by Pool Netting. Pool Netting will introduce the comparison, trade guarantee, netting and CCP settlement of pool allocations submitted in satisfaction of members’ outstanding TBA obligations. Contingent upon regulatory approval of CCP and Pool Netting, the Mortgage Novation project will further extend CCP services by introducing a daily net of all TBA Trades, novating trades upon match, modifying the risk management process to allow for a cash pass-through of the daily trade mark-to-market, and introducing fail netting at both the TBA and Pool levels. It will also establish a trade-for-trade comparison service for both TBA trades and trades carrying stipulations (“stip trades”) and will allow members to match specified pool trades based on pool number/CUSIP number without reference to a TBA CUSIP. All trades compared in the Mortgage Novation service will be guaranteed by FICC.

To develop the Mortgage Novation Service, FICC initially vetted high-level business concepts with some of the Pool Netting pilot members to establish the service’s basic components. These were communicated to our membership in February 2009, when FICC issued a white paper entitled “Service Description for Central Counterparty (CCP) for Mortgage Backed Securities – The Next Steps” (available on our corporate website at http://www.dtcc.com/downloads/leadership/whitepapers/MBSCP_Next_Steps.pdf). The purpose of the paper was to detail, for the broader membership, the the Mortgage Novation Service’s preliminary design and to solicit member feedback.

Following the publication of that paper, FICC formed a working group whose goal was to provide functional detail around the components of the Mortgage Novation system. FICC gratefully acknowledges the effort they gave to this phase of the project. To ensure that all segments of FICC’s membership were represented, and the nuances of their individual roles in the market were considered, the working group was made up of dealers, brokers and mortgage originators. Following a series of detailed discussions throughout 2009 and into 2010, FICC vetted the proposal with a larger group of members and other interested parties, such as service bureaus and vendors supporting our members in a series of meetings during Q2/Q3, 2010.

This document is a synopsis of the work that has been done with the help of our working group and our membership at large. The document is intended to provide members with an understanding of Mortgage Novation inputs and outputs, as well as the processes that will be employed by FICC on a daily

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1 Pool Netting was introduced as a production pilot in September, 2009 with five participating firms. The pilot stands at 20 active members at time of publication. Pending regulatory approval of CCP status, MBSD will expand Pool Netting to include all MBSD Clearing Members and eligible pool CUSIPs via a phased-in approach.
basis to support trade comparison, netting and risk management of submitted MBS trade activity. The functionality outlined in this document may change as development of the project continues. FICC will advise members of changes as it progresses through the development process.

Additionally, FICC will provide updates to this paper and adjust its planned implementation of the Mortgage Novation service as governing bodies provide clarification around changes to the housing finance industry.

2. Service Summary

Mortgage Novation will support three trade comparison services – one for trades destined for netting (TNET – TBA Netting Trades), a second for trade-for-trade (TFTD) transactions, and a third for Options (OPTNs). Under the TFTD trade type, FICC will support three subsets of TFTD comparison. FICC will continue to offer a TFTD TBA trade comparison service and a TFTD SPT trade comparison service. In addition, FICC will introduce a TFTD Stip trade comparison service for those trades executed with stipulations. FICC will also support comparison of put and call option trades.

All trade instructs regardless of trade type must be bilaterally compared, meaning that the buyer and seller to the trade must submit trade instructs into the system, and specific fields must be the same on both submissions for the trade to compare.

FICC will support brokered trades and, as occurs today, those brokered trades will undergo two-sided comparison against the dealers’ submissions. The trades will be partially compared (PMAT) when one dealer matches the broker record, and fully compared (FMAT) when the second dealer matches the broker record.

Compared netting-destined TBA trades will undergo TBA netting on a daily basis by TBA CUSIP and by contractual settlement date. The proposed netting process is very different from the TBA balance order netting available to MBSD members today. Today’s process has a hard cut-off time three days prior to contractual settlement date. Trades are netted once, and the contra-side created as a result of TBA Netting today is another dealer (i.e., FICC nets using a balance order netting process).

The Mortgage Novation process will net trades every business day the prior day’s net settlement obligation will be canceled and a new one will be created to include the current day’s FMAT trade activity. All net settlement obligations will have FICC as the settlement contra-side. Once an FMAT trade has been included in the netting process, the trade will not be available for any further actions by the member.

All TNET and TFTD trades in the Mortgage Novation service will be guaranteed at point of comparison, risk managed and novated versus FICC once the trade becomes fully compared. The effect of this is that all allocations and settlements will be made versus FICC.²

² FICC will guarantee for cash settlement OPTN trades but will not novate them. Members will manage the exercise of OPTNs outside of FICC. FICC will purge the OPTN trade on the close of business on expiry date.
On 48-hour day and beyond, members will be able to exclude trades from the allocation process by marking them for pair-off. The pair-off function forces the trade through the net rather than allowing it to be allocated against. This is done to capture all potential netting activity in the net.

To support the above activity, FICC will develop a series of messages and web screens including Instruct, DK, Modify, Cancel, Trade Customer Delivery Requests and Releases, Pair-offs and Pair-off Releases and Reconciliations. Members will be given intraday query functionality through FICC’s RTTM Web screens. Finally, FICC will generate a daily set of machine-readable output (MRO) reports to recap the daily activity.

To capture any off-cycle settlement trading activity or delayed allocation activity in the netting process, FICC will introduce a fail netting service at both the TBA and the Pool levels. Fail netting will be limited initially to fail netting within the same contractual settlement month, meaning that FICC will net failing activity against activity that has different contractual settlement dates within the same month, but FICC will not net failing TBA trades or Pool obligations against activity with different contractual settlement months.

FICC’s processing of mark-to-market (MTM) on trades will also change under the Mortgage Novation service. Currently, FICC captures the calculated MTM as a component of its Clearing Fund. As part of the Mortgage Novation service, FICC will introduce a cash pass-through of the MTM as a component of Funds-Only Settlement and harmonize the process between FICC’s two divisions (the Government Securities Division and the Mortgage-Backed Securities Division).

Funds-Only Settlement, will be collected /paid twice daily\(^3\) – once in the morning, based on the end-of-day calculation, and once intraday, based on an intraday calculation. Members’ net debits / credits will be automatically collected /paid at the settling bank level using the Federal Reserve’s National Settlement Service (NSS)\(^4\).

**Comparison to Existing Service**
The following table provides a quick compare and contrast between the current service and the proposed Mortgage Novation Service.

<table>
<thead>
<tr>
<th>Current Process</th>
<th>Mortgage Novation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA Netting By SIFMA Class once per month</td>
<td>Daily TBA Netting by TBA CUSIP and Contractual Settlement Date</td>
</tr>
<tr>
<td>TBA Netting creates multiple positions against multiple counterparties at different prices</td>
<td>One Settlement Counterparty (FICC) by TBA CUSIP and contractual settlement date</td>
</tr>
<tr>
<td>Must allocate offsetting trades that were not</td>
<td>Offsetting trades can be netted and excluded</td>
</tr>
</tbody>
</table>

\(^3\) FICC will retain the right to collect the MTM more than twice a day under its rules in times when FICC deems that sufficient degree of market disruption is occurring to warrant it.

\(^4\) Note that the current commonly used terminology for Funds-Only Settlement is Cash Settlement. To harmonize language between its divisions MBSD will adopt the GSD and NYPC term of Funds-Only Settlement with this project.
<table>
<thead>
<tr>
<th>captured in the net</th>
<th>from allocation process</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Fail Netting offered</td>
<td>Fail Netting within same contractual settlement month</td>
</tr>
<tr>
<td>Mark-to-Market collected as component of Clearing Fund</td>
<td>Mark-to-market managed as a cash pass-through event</td>
</tr>
<tr>
<td>TFTD SPT limited to pool numbers that fall under a TBA Netting eligible CUSIP</td>
<td>Link between pool number and TBA CUSIP no longer needed allowing for expansion of the service</td>
</tr>
<tr>
<td>FICC collects debits and holds them for later pay-out against credits⁵</td>
<td>Net debits/credits collected/paid simultaneously as part of Funds-Only Settlement</td>
</tr>
<tr>
<td>No distinction between TFTD TBA and TFTD Stip trading activity</td>
<td>TFTD Stips will be compared with a Stip indicator on the message</td>
</tr>
</tbody>
</table>

**Benefits**

In many regards, the operational efficiency that this process will bring to the marketplace is the primary benefit for members. As a result of the Mortgage Novation Service, it is expected that additional trading activity will be captured in the net either through: 1) daily end-of-day netting; 2) using the intraday pair-off; or 3) through the introduction of fail netting. The opportunity to extend netting beyond the hard and fast cut-off of today’s 72-hour day should significantly reduce the number of allocations that members must manage on a given 48-hour day and beyond. It is anticipated that this will have a positive impact on the number of fails in the market place (because the opportunity to fail will be reduced through netting) and will reduce the associated cost of failing to deliver.

The simplicity of allocating against a single contra-side (FICC) versus the multiple contra-sides of today’s allocation world will remove an operational burden on individuals and systems.

In the current environment, FICC operates its broker business using a give-up model. As a result, trading activity is not blind; the dealer contra-side is hidden for a time and then exposed. The introduction of daily netting and novation will allow FICC to generate a net-out of the broker on all fully-compared trades and to protect the anonymity of the dealers, since all members will settle versus FICC as CCP. It also means that operationally members will no longer be required to process the give-up events in their systems. This should simplify the operational process for members.

The retirement of the Notification of Settlement (NOS) process is another example of how Mortgage Novation will simplify the operations process for members. With the novation of all compared trades versus FICC, NOS can be retired and members can eliminate the effort needed to make sure FICC’s books accurately mirror each member’s internal positions.

The change to a cash pass-through model of the MTM will allow FICC to harmonize its processing of mark-to-market. This benefits the member in a number of ways. First, the cash pass-through limits each

⁵ Debit SBOMD is collected on the day prior to contractual settlement date and credit SBOMD is paid out on contractual settlement date. With the introduction of CCP Pool Netting, debit Funds-Only Settlements (including SBOMD) will be collected in the morning and credit Funds-Only Settlements will be paid out in the afternoon. CCP Pool Netting moves SBOMD debit/credit cash movements to the same day, but there will continue to be a lag between collection and payment.
member’s exposure to market changes to the last time the mark was collected. Secondly, for members with a net credit, the pass-through gives the member the full benefit of the mark (whereas in the current model the member is limited by the minimum clearing fund requirement). Members will need to assess for their particular firms the impact that the novation of trades versus FICC will have on their credit exposures against original trading contra-sides and the impact it has (if any) on regulatory capital charges.

**Summary Chart**

<table>
<thead>
<tr>
<th>Trade Type</th>
<th>Novate</th>
<th>Eligible for TBA Net</th>
<th>Eligible for Pool Net</th>
<th>Guaranteed</th>
</tr>
</thead>
<tbody>
<tr>
<td>TBA Netting (TNET) Trades</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>TFTD TBA trades</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>TFTD SPT trades</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>TFTD Stip Trades</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Options</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Timeline**

Members can expect the following:

- Publication of SWIFT-based Interactive Messaging/file specification document: Q1, 2012
- Publication of MRO Output document: Q3, 2012
- Test Region available for member testing: Q3, 2013
- Production release: Q4, 2014
3. Service Description

Membership and Account Structure
All members will be automatically eligible to participate in all trade type activity: TBA Netting-Destined (TNET), trade-for-trade (TFTD) and Options (OPTN). FICC will retire the TFTD-Only and OPTN-Only membership categories. Existing member accounts and participant ID’s will be used to support the Mortgage Novation trade comparison model. Members will not be required to open new accounts or participant ID’s. The aggregate ID will be modified from a numeric-only field to an alphanumeric field.

Guarantee
With the introduction of CCP Pool Netting, FICC will guarantee all compared trades. Under the Mortgage Novation service, the guarantee will remain unchanged for all trades compared with a TBA CUSIP or, in the case of SPT trades, for those trades that fall under a TBA CUSIP.

For any compared trade that does not fall under a TBA CUSIP or is an Option Trade, FICC will provide a guarantee for cash settlement. In such cases the solvent member will liquidate the position for an identical or equivalent product and submit to FICC the liquidation trades and the cost basis of those trades. FICC will provide a guarantee to make the member whole for any price difference between the original trade and the liquidation trade.

Trade Types
FICC will continue to support a bilateral comparison process for all trade input.

**TBA Netting (TNET) Activity:** The TNET trade type replaces SBOD. Netting in this service will not be done on as a balance order model; it will use FICC as the central counterpart for all netting results. The availability of good delivery guidelines published by the Securities Industry and Financial Markets Association (SIFMA) for a TBA CUSIP, along with the availability of reliable pricing information, are the criteria used in determining if a TBA CUSIP is eligible for TBA Netting. These criteria are used by the current balance order netting model and, as such, the list of TBA netting-eligible securities is not expected to change under the Mortgage Novation service.

FICC will require that all trades that satisfy the criteria for netting be submitted as netting-destined trades. As such, any TBA trade that is submitted for comparison under a netting-eligible TBA CUSIP with a round million par value and traded as regular TBA (i.e., with no stipulations attached to the trade) must be submitted for netting. If such a trade is submitted as TFTD, it will be rejected.6

Example 1: A member submits a trade for 1,000,000.00 in TBA CUSIP 01F050692 (a netting-eligible TBA CUSIP) as TNET. FICC will accept the entry.

Example 2: A member submits a trade for 1,000,000.00 in TBA CUSIP 01F050692 (a netting-eligible TBA CUSIP) as TBA TFTD. FICC will reject the entry.

6 FICC is introducing a TFTD Stip comparison service for trades with stipulations.
**TFTD Activity:** TFTD activity will be supported by FICC in a number of variations; namely it will support TFTD TBA activity, TFTD SPT activity and TFTD Stip activity.

**TFTD TBA:** FICC will continue to support TFTD TBA activity for those TBA CUSIPs that are not netting-eligible or when the trade’s par is not a round million or multiple round millions – in other words, the trade was traded TBA but was an odd lot value.

Example 1: A member submits a trade for 750,000 in TBA CUSIP 01F050692 as a TFTD TBA Trade because it cannot be submitted as TNET. It is not a round million.

Example 2: A member submits a trade for 1,000,000 in TBA CUSIP 01F050551 as a TFTD TBA Trade because it cannot be submitted as TNET. The TBA CUSIP is not netting eligible.

**TFTD SPT:** FICC will also continue to support comparison trades on a TFTD basis when the specific pools of the trade have been agreed to at time of trade execution. This sub-category of TFTD trade will continue to be known in the system as Specified Pool Trades (SPTs). FICC will no longer require that members submit both the TBA CUSIP and the Pool Number on SPT activity. Members will only be required to submit the Pool Number or CUSIP number and, where appropriate, FICC will map that to the underlying TBA CUSIP for risk management purposes. However, if members continue to submit a TBA CUSIP, FICC will not reject the trade input, but will disregard the TBA CUSIP information provided on it.

FICC will also expand the SPT service to accept a broader array of SPTs executed in Pool CUSIP numbers that do not necessarily map to TBA CUSIPs. For these Pool CUSIP numbers to be eligible for FICC’s trade comparison and guarantee services, FICC must have the Pool CUSIP number on its masterfiles and must receive reliable pricing information on a daily basis. For example, FICC is considering supporting comparison of SPT activity in Adjustable Rate Mortgages. Once FICC determines which pools will be eligible for trade comparison and the resulting guarantee under the expanded SPT service, FICC will add the pools to its security masterfile and notify members. If a pool is submitted to RTTM that is not supported under the SPT service, FICC will reject it with a reason code detailing the reason for the reject.

**TFTD Stip:** To satisfactorily manage its trading activity compared through FICC, members will need a new TFTD sub-category – the TFTD Stip category. Members will use this to book TBA trades that were executed with stipulations (stips) attached to them – for example, 1 pool per million, 1 pool max, etc. If a trade was traded at a round million, but should not be netted due to such stips, it should be submitted by members for comparison as a TFTD Stip.

Given the variety of trading stips that exist, FICC has determined, in conjunction with the MBS Working Group, that it will not to try to standardize these stips. Members will submit the trade as a TFTD Stip trade but will not identify the actual stip terms on the record. The single exception to this is when the trade was executed with a variance stip. For risk management purposes, FICC must know when a trade is within the agreed upon variance for the trade (e.g. 1% variance). Knowing the trade’s tolerable variance

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7 FICC will set up tables to code for stip entry to allow for standardization of codes in the future if members choose to expand the defined stips beyond variance.
will allow FICC to identify the trade as closed and release the trade from its risk management process once the trade settles within variance.

Because variance stipps are often traded with wide variance, which may then narrow as the allocation information becomes known, members may be required to cancel and correct those trades rather than risk FICC closing out the trade too early.

**Option Activity:** FICC will support comparison of put and call options. Changes to this service are very limited and include: 1) all accounts will automatically be eligible for OPTN trading; and 2) FICC will systematically delete OPTN trades on the evening of their expiry date rather than require members to submit cancels against them. Options will not novate versus FICC, but will be guaranteed for cash settlement and will be risk managed. Because the changes to OPTNs are limited, they are not discussed in detail in this document.

**Submission and Comparison**
Submission of trading information to the Mortgage Novation system will be available through SWIFT-based interactive messaging, SWIFT-based batch file submission and through FICC’s RTTM Web Front End. FICC is also examining the possibility of a file upload service that may support an “.xml type” format.

To support member development of trade input and the subsequent actions that may be taken on those trades, FICC will develop and release, in early-2012, an Interactive SWIFT-based messaging specifications document. To the greatest degree possible, FICC intends on using the existing message layouts as templates for Mortgage Novation trade input. This should minimize the development effort for members.

While the messaging will be modeled based on the existing layouts, FICC is in the process of reviewing the current message flows. Where possible, FICC will modify the message flows to reduce the number of messages it sends to members. With the exception of acknowledgement/reject messages, subscription to message output will be optional. Upon publication of the messaging specifications document in 2012, members should carefully note the changes in flows and analyze the impact these changes will have on their internal processes.

FICC will also develop and support intraday SWIFT-based batch file submissions. Because RTTM is a real-time comparison facility, FICC will require that members submit multiple SWIFT-based batch files throughout the day to ensure the timely receipt of trade information. FICC will monitor member submissions of files and will consider implementing a surcharge on members that do not submit files in a timely manner. Members may also use the intraday SWIFT-based batch file submissions as a back-up to their usual processing. FICC will respond to a SWIFT-based batch file input with a SWIFT-based batch file output. This new functionality is currently under review and the details of the output file will be included with the publication of the messaging specifications document.
FICC will also support trade input and subsequent actions that may be taken to trades via its RTTM Web Front End. As is provided today, all trade management functions will be available via the RTTM Web Front End, including trade input, query of trade details, subsequent actions on the query results, etc.

FICC will seek to match trades in a real-time manner as it does today. Par on the buyer and seller submission must match exactly on dealer versus dealer trades. On brokered trades, FICC will continue to support comparison on a net position basis, meaning that it will split or splice dealer trades to match broker par input if all other terms are equal and the sum of the pars are equal.

As part of this process, FICC will retire all proprietary batch input. Proprietary batch files in the current environment are primarily used for Notification of Settlement, a process that will no longer be required with the introduction of Mortgage Novation (see Settlement section below).

To support trade processing, FICC will make available a series of inputs. These are described in greater detail in section Input Messages Overview.

1. **Trade Instruct** – This message is used by both the buyer and the seller to a trade to submit trade data into RTTM for validation, comparison, risk management, and subsequent TBA Netting (when applicable).

2. **DK (Don’t Know)** – This message is used by either the buyer or the seller to inform its counterparty that it does not know (or that it disagrees with the terms) of the trade instruct being submitted against it. It can only be submitted against an advisory (notifying the member of a trade instruct submitted against it). Submissions against a compared trade instruct will be rejected by the system.

3. **Modify** – A full ticket modify will be available on all uncompared trades. Once fully compared, only the xref will be available for modification, a broker may modify the contra and/or commission value on the uncompared side of a PMAT trade. No trade term modifications will be available on trades that have FICC as the contra-side because they have been included in the netting process. Members will be able to modify their xref on any trade versus FICC.

4. **Trade Customer Delivery Request (TCDR)** – This message type is available on netting-destined trades. The TCDR will be offered at two levels—the single trade level to target an individual trade or the global level to target a group of trades having the same TBA CUSIP. The TCDR will be used to preclude a trade from operational netting. It is valid against TNET trades only (not TFTD trades because they are not netting-eligible). All trade instructs with a TCDR will be aggregated by buy side and by sell side (i.e., establishing one trade per side) as part of the end-of-day netting process.

5. **TCDR Release** – Used by the buyer and/or seller to release a previously submitted TCDR. The user can release (remove) all or part of the TCDR from an individual trade, or may use the global level to release TCDRs set at the global level.
6. Pair-off – Used by members to indicate to FICC to net a series of buy and sell trades in its end-of-day process and exclude them from the allocation process.

7. Pair-off Release - Used by members to indicate to FICC that a series of buy and sell trades previously marked for inclusion in the net and exclusion from the allocation process should now be made available for allocation.

8. Cancel Request - Used by buyers or sellers to inform their counterparties that they want to cancel a previously submitted trade instruct. The system will immediately cancel an uncompared trade and make it unavailable for comparison. Matched trades require the submission of cancel requests by both trade counterparties that must bilaterally match in order to affect a cancel. In other words, both the buyer and seller must submit comparison cancel requests with the same terms as the targeted trade in order for the trade to be canceled.

9. Reconciliation message – A message that can be submitted by any member to get a status of its trades/position with FICC.

FICC expects to set the system start-of-day to 7:00 AM ET, and to set 8:00 PM ET as the end-of-day cut-off for trade entry. FICC is, however, considering extending its trading day to accommodate trading activity done outside those hours. To that end, members should build sufficient flexibility in their systems to allow for extended system access. The hours mentioned above were chosen to keep the new system consistent with the current MBS application, as well as with the application of FICC’s other division, the Government Securities Division (GSD).

**Novation of Trades**

Guarantee of trades will occur at time of comparison for both netting-destined, TFTD trades and Option trades. Novation of TBA netting-destined and TFTD trades will occur once the trade is fully compared. In the case of a dealer-versus-dealer trade, the guarantee will occur once both sides submit matching trade terms and the system processes the comparison. In the case of a brokered trade, a partially matched trade (PMAT) will be guaranteed but will not novate until both dealers match the trade.

Although not yet the novated counterparty to the PMAT trade, FICC will act as a “go between” on all subsequent actions to the PMAT trade, meaning that FICC can be identified as the contra-side and will pass the information along to the relevant dealer.

- Subsequent actions (e.g., modifies, cancels, etc.) on an advisory arising from an uncompared trade instruct will be submitted against the original contra-side.  

- Subsequent actions (e.g., modifies, cancels, etc.) on FMAT trade instructs and the compared side of a PMAT trade instruct will be submitted against FICC.

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8 In the case of a PMAT trade, actions on the compared trade will be submitted against FICC; actions on the uncompared side will be versus the broker account.
**Daily TBA Netting**

As is noted above, TBA Netting will occur on a daily basis. This means that as soon as a TNET trade is FMAT, it is eligible for TBA Netting that evening. TFTD trades are not TBA Netting-eligible. TBA Netting will occur by TBA CUSIP and contractual settlement date. The TBA Netting process could generate multiple net positions within the same TBA CUSIP if the underlying trades have different contractual settlement dates.

TBA Netting is limited to fully-compared (FMAT) TBA Netting-Destined (TNET) trades. Trades may be either executed directly dealer-to-dealer, or may be executed through an inter-dealer broker. PMAT trades are not eligible for TBA Netting. They are, however, eligible for risk management and trade guarantee (see the Risk Management and Guarantee sections for additional information).

Only ‘live’ trades are eligible for TBA Netting, meaning that the trades cannot be in a canceled state nor can the system have marked them for deletion or as ineligible for any reason. The TBA Netting process will look at the following criteria on trades marked as TNET: buy/sell, TBA CUSIP, contractual settlement date and Trade Level Customer Delivery Request (TCDR) status. Based on these terms, it will generate a single net position by TBA CUSIP and contractual settlement date, excluding any TCDR’ed position from the net position (see Trade-level Customer Delivery Request section for additional details on TCDR’s).

All TCDR’ed activity will be aggregated by TBA CUSIP and contractual settlement date to create one TCDR’ed position for all buy activity and one for sell activity. This means that at the end of the TBA netting process, the member may have up to three positions for each TBA CUSIP and each contractual settlement date – i.e., one equal to the par value of the net position (sum of buys and sells), one equal to the par value of the buy TCDR position and one equal to the par value of the sell TCDR position.

On a daily basis, the previous day’s net position is modified for that day’s trade activity to establish a new net position vs. FICC. This net position will be given a trade ID with FICC as the contra-side to the trade.

Simply put, the calculation for the creation of the net trade versus FICC on a daily basis is:

Net Position = New Member Trade Activity + previously established net position vs. FICC.

**Example 1:** A member executes the following trades between dealers in the same TBA CUSIP and all have May 20\(^{th}\) as the contractual settlement date.

- May 12, 2011  Sell 50,000,000
- May 13, 2011  Buy 30,000,000, 5,000,000 and 7,000,000
  Sell 20,000,000
- May 14, 2011  Sell 20,000,000
Example 2: A member executes the following trades between dealers in the same TBA CUSIP and all have May 20th as the contractual settlement date. Some of the activity is TCDR’ed.

May 12, 2011  Buy 15,000,000  
               Sell 50,000,000  
May 13, 2011  Buy 30,000,000, 5,000,000 and 7,000,000  
               Sell 20,000,000 – TCDR’ed  
May 14, 2011  Sell 20,000,000 – TCDR’ed

*TCDR’ed position is not included in the net position but is aggregated into one single TCDR’ed position by buy side and by sell side. This means a member may see up to three trades versus FICC per day by TBA CUSIP and by CSD.

TBA Netting Output: The TBA Net will be executed as a batch end-of-day process that will begin once the system has been closed for trade submission. The current expectation is that this process will be executed at 8:00 PM ET; however, this time is subject to change as market conditions demand a later (or earlier) cut-off time for trade input. Members should build to accommodate flexibility in the end-of-day cut-off time.

Following the TBA Netting process, FICC will produce a series of batch output reports that replay the day’s events and also reflect the TBA netting inputs and outputs. FICC will deliver output in two releases; the first will contain the netting results while the second will deliver all other end-of-day data. Providing output in two releases will ensure that TBA netting results are delivered to members as quickly as possible. The majority of these batch output reports will also be available in machine-readable

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9 The calculated Net Position will be used to create a new trade on a daily basis against FICC, replacing the prior day’s trade with FICC.
output format, print-image format and in a file format that can be opened and manipulated by members (such as Excel, comma or tilde-delimited).

 Allocation of Trades versus FICC
FICC will be the allocation contra-side to all trades. This will hold true whether the trade is in an FMAT or a PMAT status. This is true whether the trade is a trade created under the TBA Netting service or if the trade is one that compared through FICC’s TFTD TBA or TFTD Stip service. (Note: Because the pool number is a trade term on a TFTD SPT and agreed to at point of comparison, TFTD SPTs are excluded from the allocation process and any allocations made against them will be DK’ed).

All allocations against FICC will be executed through FICC’s Electronic Pool Notification (EPN) service. FICC will support a full set of messages delivered through EPN, meaning that it will receive and send Original Notification (ON) messages, Don’t Know (DK) messages, and Cancel and Correct (CC) messages. FICC will not open up previously allocated TBA position; therefore, it will not accept cancels on allocations unless the data provided was invalid for the trade. FICC will not accept cancels against valid allocations; the member must substitute the pool information.

As the CCP to all trades, FICC’s objective is to always be flat. Consequently, FICC will immediately turn any allocations it receives into its account to a member that is due to receive an allocation. FICC will do this equitably, where no member receives preferential treatment in terms of the size of the pool or the quality of the pool allocation. FICC will develop a delivery algorithm to ensure the impartiality of all turns.

All allocations must follow good delivery guidelines. **FICC will not accept allocations against TNET trades or TFTD TBA trades prior to 48hr day; they will be DK’ed by FICC.** Allocations against TFTD Stip trades will be passed to the identified buyer.

Allocations and trade status: The seller to the trade cannot allocate against it if the trade is in an uncompared state. An allocation received by FICC against an uncompared sell-side of a trade will be DK’ed back to the submitter.

PMAT trades can be allocated against if the trades meet certain criteria. First, the trade can be allocated against if the selling dealer to the trade is compared versus the broker but the buyer is uncompared. In this case, FICC will pass the allocation to the uncompared buyer of the trade. (Note: The broker is not allocated against). The buyer to the PMAT trade may DK the allocation if it does not recognize the terms of the trade. FICC will work with the broker to rectify the DK situation and will pass the allocation on to the relevant buyer following resolution of the DK state.

If the buyer DK’ed the trade instruct itself (rather than the allocation), the seller may still allocate against that trade. FICC will hold the allocation rather than deliver it to the buyer that had DK’ed the trade instruct. Once again, FICC will manage the DK as an exception and work with the broker to resolve the problem.
Example 1: Dealer A and Broker B have a PMAT trade (TID 1). Dealer C and Broker B have not compared. Dealer A is the seller. Dealer C is the buyer.

Dealer A delivers pool information to FICC against TID 1. FICC will identify Dealer C as the buyer to the trade and will pass the allocation to Dealer C.

If Dealer C DK’s the allocation, FICC will contact Broker B and work with it and Dealer C to resolve the allocation issue. Dealer A’s allocation is not impacted by Dealer C’s DK.

Example 2: Dealer A and Broker B have a PMAT trade (TID 2). Dealer C and Broker B have not compared. Dealer C DK’ed Broker B’s trade instruct in RTTM. Dealer A is the seller. Dealer C is the buyer.

Dealer A delivers pool information to FICC again TID 2. Dealer A’s allocation is not impacted by trade DK by Dealer C. FICC will not turn the allocation to Dealer C.

FICC will contact Broker B and work with it and Dealer C to resolve the trade issue.

In both the DK situations described above, if FICC needs to take an overnight finance charge while the issue is being resolved, that charge will be passed back to the party at fault. (For example, if the broker had bad terms on the trade that caused the dealer to DK the allocation, the broker would be assigned the charge. If the buying dealer DK’ed in error and should receive delivery of the pools, the charge would be assigned to the buying dealer.)

PMAT trades cannot be allocated against if the seller is the uncompared contra-side to the trade, i.e., the buyer is compared versus the broker but the seller is not. The seller cannot initiate an allocation on an uncompared transaction.

Forced Comparison of PMAT Trades: If FICC delivers an allocation to a buying dealer of a PMAT trade and the buyer does not DK it before the end of the day, FICC will consider the allocation accepted and will change the status of the PMAT trade to compared. FICC will notify the member of the action it takes via SWIFT-based Interactive Messaging/file and the end-of-day reporting.

Allocations and TNET Trades: When FICC receives an ON message from a member, its first action will be to determine if it is delivered against a TNET trade, a TFTD TBA trade or a TFTD Stip trade. FICC will look to see if a trade ID is included on the EPN message. (Trade ID is mandatory on TFTD Stip trades.) Because TNET trades are part of a netting process and the seller has no knowledge of the overall position of the original buyer, any trade ID’s included on allocations against TNET trades will be ignored by FICC. Instead, FICC will turn the allocation to the buyer it identifies as being the best buyer for the allocation. FICC will identify a buyer with a position in the same TBA CUSIP and same contractual settlement date and, where possible, the same price. FICC will turn the allocation to that buyer. If more than one buyer can take the position, FICC will identify the appropriate buyer using the algorithm it has developed to ensure fairness.
If the trade ID is not included (or is ignored) and the system can apply the pool against either a TNET trade or a large lot (>1MM) TFTD TBA trade, FICC will preferentially apply the GDM pool against the TNET trade rather than adjusting the open par of the TFTD trade.

Allocations and TFTD trades: Two types of TFTD trades will be allocated against: TFTD TBA Trades and TFTD Stip trades.

The trade ID is not needed on TFTD TBA trades (i.e. an odd lot trade) because the TFTD TBA terms are fungible; in other words, one TFTD TBA trade is the same as any other where terms are the same. Therefore, when FICC receives an allocation that is an odd lot and does not contain a trade ID, it identifies a TFTD TBA for the full amount of the allocation and will assign it to that trade, passing it directly to the buyer of the trade. If a trade ID is included on the message that targets a TFTD TBA trade, FICC will ignore the ID and will pass the allocation to a buyer of its determination.

As noted elsewhere, allocations against TFTD TBA trades must satisfy good delivery guidelines and FICC will edit and validate the terms submitted in the messages to ensure that they conform to the guidelines.

Generally, because FICC is not privy to the agreed upon terms of a stip trade, it will not validate the terms of the allocation and the terms do not need to satisfy good delivery guidelines. FICC will make sure that the pool number is good for the TBA CUSIP of the trade and the trade terms match and will decrement the position by the value of the current face of the pools, but will not do any further business edits on the allocation. The exception to this is when the trade was compared with a variance stip. In this case, the trade’s allocations must conform to good delivery guidelines but will use the agreed to variance instead of the SIFMA variance guideline. In the case of a variance stip, FICC will edit and validate the terms of the message.

TFTD Stip trades must contain a trade identifier in the body of the EPN message so that FICC can identify the correct buyer of the stip allocation. Two fields will be used on the EPN message to allow FICC to identify the trade, one of the two must be populated on every pool that is allocated against a TFTD Stip trade: the trade ID field and/or the control number field. If Trade Number field is used, it will contain the RTTM trade ID of the trade; if the control number field is used, it will contain the RTTM x-ref of the trade. FICC requires the trade identifier and/or control number so that it can identify the correct buyer to the TFTD Stip and pass the allocation to that buyer. If a trade ID/control number is not included on the ON message, FICC will process the message as either a TNET trade or, if the par is not in a round million, as a TFTD TBA trade.

Cancel and Correct Messages: All cancel and correct messages must contain a reference back to the original EPN message ID. FICC will use this to pass the cancel and correct to the buyer of the pool.

Cancel Messages: FICC will not accept cancel messages delivered against previously allocated and valid pools. FICC will only accept pool substitutions against valid previously allocated pools; FICC will not “open up” TBA position. If, at time of allocation, FICC does not identify an invalid pool delivery and accepts the allocation, it will process subsequent cancels (both receipt and delivery of cancels) of that
allocation once the error is identified. Because there should be a very remote likelihood of this occurring, FICC believes that this is the best solution for this problem.

**Pool Netting**
All allocations that FICC accepts in TNET trades and TFTD TBA trades will be available for pool netting. Allocations against TFTD Stip and TFTD SPT trades are not eligible for pool netting. Once FICC receives or sends an allocation against a valid trade, it will create a pool instruct advisory out to the contra-side for comparison in pool netting. That advisory will remain available for actions by the member in the pool netting system (i.e., DK, match, pool netting CDR, etc.) up until it is evaluated for pool netting. Additionally, if the member takes any actions at the EPN level that would necessitate a change in pool netting (such as substituting an allocation) then FICC will update pool netting to reflect that EPN action.

If the pool advisory remains uncomposted at the point in time that it should be included in the pool netting process, FICC will generate a match on the record and the member will be advised via MRO/Report output that FICC force-compared the record.

**Settlement**
As noted above, all trades (except options) will settle versus FICC, allowing for the complete retirement of NOS. TFTD Stips and TFTD SPTs are not pool netting-eligible and, therefore, FICC will set up delivery obligations based on either the delivery date of the allocation (in the case of a TFTD Stip trade) or based on the contractual settlement date (in the case of a TFTD SPT trade). For TNET trades and TFTD TBA trades, the allocations against them undergo pool netting and the pool netting process generates the delivery obligations. FICC will create one settlement report that captures all settlement events by date regardless of what process created them.

When FICC receives a delivery obligation into one of its settlement banks, it will automatically turn that to the buyer. All obligations will be settled delivery-versus-payment (DVP). When a seller delivers an obligation to FICC’s account at one of its settlement banks, FICC will automatically deliver the obligation to the buyer on the receiving end. After month-end, FICC will begin to see pools settle with a contractual settlement date in the past (see the Fail Netting section below). In this case, FICC plans on using the Fed Fail Tracking system to allow members to keep their settlement processes consistent between FICC members and non-members. Pool netting introduced a process whereby it tracks fails and debits and credits P&I for any fails not falling under the Fed Fail Tracking system, and this will be extended in Mortgage Novation to TFTD Stip and TFTD SPT delivery obligations that will now settle versus FICC.

In the event that FICC must finance a settlement position overnight because it received pools too close to the cut-off of the Fedwire to turn them to the buyer, the cost of that financing will be transferred to members in an equitable manner. This means that FICC will determine if one or more members are consistently responsible for the fails, or whether the fails in any given month are attributable to the broad membership. The assignment of the finance charge will be allocated to the responsible members or the broad membership, as appropriate, following analysis by FICC personnel.
**Fail Netting**

FICC will execute a TBA fail netting process on all unallocated TNET trades from contractual settlement date and beyond. Members will be able to place a TCDR on an unallocated TNET trade to prevent it from being included in the TBA net position as described elsewhere in this document. The TBA fail netting process will be a component of the overall end-of-day netting process.

TBA fail netting essentially modifies the contractual settlement date on the failing TBA trade to the next settlement date. By making this change, FICC can net the fail position against other TBA position with a contractual settlement date of the next business day. In this way, FICC can maximize the number of trades that can be netted, i.e., FICC can take “off-settlement” trading activity and allow it to be included in the net. For members, this provides a more efficient netting solution and potentially offers the opportunity to expand the netting activity for any given month out past the SIFMA-designated A, B, C and D settlement dates.

With the change of the contractual settlement date as a result of TBA fail netting, FICC must, to maintain the trading value of the trade, make an adjustment for the additional day’s interest out to the new contractual settlement date. FICC will capture the additional day’s interest as a component of its Funds-Only Settlement calculation (refer to the section detailing cash pass through) and will automatically pass that interest from the seller to the buyer on the trade.

Unlike the Government market where a bond’s underlying value does not pay down over month end, the mortgage-backed securities market must take into account the inherent pay down of the current face of a failing TBA trade over month end. The complexity of calculating the paydown on a TBA trade, adjusting the current face for it, and the resultant non-round millions that would be created have led FICC to conclude, along with the members of its working groups, that netting across contractual settlement months would be counterproductive to developing this service at this stage. FICC will, as noted above, net by TBA CUSIP and, once month end is reached, the TBA CUSIP will not convert to the next month’s settlement month and check digit. Therefore, while all trades will continue to be fail netted until allocated, any unallocated trades from one month will not net against the next month’s activity. Previous months’ unallocated trades will net against any “as of” trades submitted with a contractual settlement date from the previous month.

FICC will run a fail netting process on all unsettled Pool Obligations on a daily basis. The process of fail netting Pool Obligations will be similar to the process described above for TBA Fail Netting, in that the delivery date and contractual settlement date of the obligation will be changed each day it fails and FICC will adjust the interest for the additional day. As with TBA fail netting, once the end of the month is reached, FICC will continue to net the pool obligations against other pool obligations with the same contractual settlement month but will not modify the contractual settlement date past the end of the month. The delivery date on all pool obligations will change daily to establish a delivery for the next day and, as part of the pool netting process, will set the price on the obligation to the end-of-day price for the TBA CUSIP. For members, this means that every day a new delivery obligation will be established out of the netting process, and members will need to change their expected delivery obligations at the bank every day to account for this.
To capture the failing obligations in the pool netting process, FICC will move the timing of the pool netting process to later in the day. With the introduction of fail netting for pool obligations, the pool netting process will shift to after the Fedwire close. If the Fedwire close is delayed for any reason, FICC will delay the pool netting process so that it can capture all failing POIDs in the fail netting process.

Members should not build a hard cut-off time for pool netting, but rather should build a dependency based off the close of settlement plus a configurable number of minutes.

The following example will help to illustrate the fail netting process.

<table>
<thead>
<tr>
<th>Event</th>
<th>Trade Number</th>
<th>TBA CUSIP</th>
<th>Trade Match Date</th>
<th>Contractual Settlement Date</th>
<th>Trade Value</th>
<th>FICC Net trade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TRADE 1</td>
<td>01N040611</td>
<td>15-Jan</td>
<td>20-Jan</td>
<td>10MM</td>
<td>10MM</td>
</tr>
<tr>
<td>2</td>
<td>TRADE 2</td>
<td>01N040611</td>
<td>23-Jan</td>
<td>25-Jan</td>
<td>3MM</td>
<td>7MM</td>
</tr>
<tr>
<td>3</td>
<td>TRADE 3</td>
<td>01N040611</td>
<td>1-Feb</td>
<td>31-Jan</td>
<td>1MM</td>
<td>6MM</td>
</tr>
<tr>
<td>4</td>
<td>TRADE 4</td>
<td>01N040629</td>
<td>1-Feb</td>
<td>5-Feb</td>
<td>3MM</td>
<td>(3MM)</td>
</tr>
</tbody>
</table>

Event Details

1. On Jan 15th the net trade generated for this member with a contractual settlement date of Jan 20th is 10MM. The trade fails to be allocated and, from Jan 20th to Jan 24th the contractual settlement date on the trade is set to the next day each day, the trade is fail netted, and an interest differential is calculated and included in the funds-only settlement, i.e., as the trade fails to be allocated against it is included in fail netting and its contractual settlement date changes daily to the 21st, then the 22nd, 23rd, and 24th.

2. EOD on January 24th the contractual settlement date is changed to the 25th. The member has additional trading activity with a contractual settlement date of the 25th. FICC will create one net position for the overall book, i.e. the 10MM long will be netted against the short 3MM to create an overall position of 7MM for settlement on January 25th.

Assume that the 7MM also fails to be allocated against from January 25th through February 1. Again, FICC will change the trade’s contractual settlement date daily up until January 31st. From January 31st onwards, FICC will not change the contractual settlement date. It will, however, continue to make the interest calculation for the day’s interest, and will pass that between the members (see Funds-Only settlement section later in this document for more information).

3. On February 1st FICC receives a new trade with a contractual settlement date in the past, i.e., a January 31st contractual settlement date. This trade will be netted against other trades with a January date. Despite the fact that we have crossed over month end, January activity will continue to be netted against other January activity. Consequently, the net January trade in this TBA CUSIP will be long 6MM.

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10 The pool netting process currently begins at 2:00 PM EST.
4. The other trade that the member compared on February 1\textsuperscript{st} has a contractual settlement date of February 5\textsuperscript{th} and so it will not be netted against the January trades. It has a different settlement month and so is not eligible for netting against the January TBA CUSIP.

**Risk management**

FICC is anticipating going live with MBSD CCP Pool Netting as a standalone margin service, i.e. Pool Netting will not be implemented concurrently with Single Pot Margining with GSD and NYPC, and will include in its risk management process two additional components to address the additional risk for guarantee – the margin requirement differential (MRD) charge and the coverage component (CC). Following CCP Pool Netting, FICC will assess the impact of including MBSD trading activity into the GSD/NYPC single pot margining portfolio and its associated formal intraday margin call.

Regardless of which risk model is in production when the Mortgage Novation service is implemented, FICC will modify its risk management process to either introduce a formal intraday call or to continue to support one if that is the model employed at time of release.

Additional information on the risk model will be made available to members closer to production release of the service.

**Funds-Only Settlement (“FOS”):** Whereas today MTM on both trades and delivery obligations created out of Pool Netting are now captured as a component of Clearing Fund, FICC will manage MTM as a cash pass-through under the Mortgage Novation Service.

The calculation of MTM will not change under the Mortgage Novation process. It will continue to be the difference between the trade’s contract value and its current market value. FICC will calculate each member’s MTM across all trading activity to come up with one overall debit/credit amount, and will collect debit marks and pay out credit marks twice daily as a component of Funds-Only Settlement (FOS). Payment of a debit MTM to FICC, or receipt of a credit MTM from FICC, will be netted against other FOS items and the net FOS amount will be processed through the Fed’s National Settlement Service (NSS). Currently, MBSD is limited to one Funds-Only Settlement cycle, which is processed at 10:00 AM. With the introduction of the cash pass-through of the MTM, FOS will be changed to a twice daily process to capture the intraday and end-of-day MTM on all trades.\textsuperscript{11} If Single Pot Margining has been approved prior to or in tandem with the Mortgage Novation Service, members engaged in Single Pot Margining will be able to combine their GSD and/or NYPC FOS obligations with their MBSD FOS obligations to establish a net debit or credit settlement amount.

\textsuperscript{11} Currently, SBOMD cash settlement occurs four times a month for MBSD; for members in a net-debit position, debits are collected at 10:00 AM the day before the SIFMA established contractual settlement date and credits are paid to members in a net-credit position at 2:45 PM the day of contractual settlement date. With the approval of CCP and Pool Netting, there will no longer be a day lag between debit and credit SBOMD processing; however, debits will still be collected at 10:00 AM and credits paid at 2:45 PM. If Single Pot Margining is implemented prior to the Mortgage Novation Service, SBOMD debits and credits will settle simultaneously as part of FOS. SBOMD will be eliminated with the Mortgage Novation Service.
Along with the transfer of the MTM from the member with a debit mark to the member with a credit mark, FICC will include in FOS (up until contractual settlement date) an interest component to account for the fact that the participant having the debit mark no longer has access to those funds. As noted above, FICC intends to fail-net trades. When FICC fail-nets a trade, it will change the contractual settlement date of the trade to the next business day until month end. The additional day’s interest will be credited to the buyer of a failing trade and debited from the seller of the failing trade.

As is noted earlier in this document, the netting process will assign the end-of-day market price to netted activity as part of the end-of-day net. Unlike netting trades, the price on TFTD activity will not change throughout the lifecycle of the trade, resulting in a difference in the process to calculate the MTM. With TNET trades, the mark is always the difference between the market price and the last known trade or mark price, i.e., yesterday’s end-of-day price or the intraday mark price\textsuperscript{12}, whereas with TFTD trades, the mark is the difference between the market price and the original trade price. To accurately capture the difference between the market price and the trade price on a TFTD, FICC will must introduce a ‘mark unwind’ to undo the last mark and restore the value of the trade back to the original trade price. The decision was made to bifurcate the MTM process applied to netting trades versus TFTD trades because of the great number of daily cancel and corrects that would be needed on TFTD activity if the trade prices were to reset daily.

Purging Trades
FICC plans on implementing a more efficient process for purging trading activity with the introduction of the Mortgage Novation Service. If a trade instruct remains fully uncompared (i.e., is not PMAT), it will purge after a specified number of days. Currently, FICC is contemplating purging the trade instructs if they remain uncompared on the third business day after submission. FICC will seek member feedback on this purge logic, which will apply to TNET trade instructs, TFTD trade instructs and Option trade instructs.

All Option trades will purge, regardless of match status, on the evening of Expiry Date (if not sooner as indicated above).

The purge rules for pool netting instructs will not change.

Reporting
In addition to the SWIFT-based Interactive Messaging/file output mentioned previously, FICC will create end-of-day machine-readable output (MRO) that summarizes the daily activity, the end-of-day processing and the set-up for next day start-of-day. All reports will also be created in a print-image format and posted to FICC’s Report Center, where a seven year history of reports will continue to be maintained for audit purposes. Key reports will also be created and posted to report center in a format that can be manipulated by members, such as tilde or comma-delimited formats.

\textsuperscript{12} If not already in place prior to the launch of this project, FICC will introduce a formal Intraday mark for trades submitted to MBSD. Note that unlike the end of day process TNET trades will not have the price reset to the intraday mark price.
In Q3 2012, FICC will publish a document detailing each report. Members can anticipate that reports will be developed to provide members with a full recap of all activity on a given day, and the timing of report output should be no later than 2:00 AM ET.

4. Input Messages Overview
To support trade input for trade comparison and netting of TBA Trades and Pool Obligations, FICC will build a series of input messages that can be submitted into RTTM either interactively or via a SWIFT batch file. FICC will make the same functionality available via its RTTM Web Front End interface.

EPN will be the required system for all allocation information to be delivered to and received from FICC.

Following allocation, FICC will use the existing Pool Netting messaging to support that function.

**Trade Instruct**
FICC will support trade instructs submitted by both brokers and dealers. Dealers will submit a single trade instruct per trade and identify one contra-side in the trade. Entry of dealer-submitted trade instructs will be supported through SWIFT-based Interactive Messaging/file and through FICC’s RTTM Web Front End.

Brokers must identify both the buy and sell dealers to the trade on their submissions, and the broker’s submitted mandatory matching fields must be the same as those submitted by the buy and sell dealer counterparties to effect a comparison. The entry of broker trade instructs will also be supported through SWIFT-based Interactive Messaging/file and through FICC’s RTTM Web Front End. In the current trade input environment, Brokers submit two tickets to generate one balanced buy/sell trade. This will change under the Mortgage Novation Service. FICC will support a single ticket entry that will identify both the sell and buy contra dealers in one input and will retire the series of messages supporting the balancing of broker inputs.

The trade instruct is used to submit trade details that will be used for comparison purposes. The message has mandatory and optional data elements. FICC will edit and validate the terms of all inbound messages and will reject any messages that do not conform to FICC’s standards. Messages entered on the web will receive immediate online response, whereas any Swift-based interactive messages will receive either an acknowledgement of acceptance or rejection via message from the system.

All message fields will be further defined with full format information in the SWIFT-based Interactive Messaging/file specifications document. The following table provides an overview of data fields. Unless noted differently, the fields in the table below are required for both broker and dealer input.

<table>
<thead>
<tr>
<th>Field</th>
<th>Validation</th>
<th>Mandatory</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account ID</td>
<td>Must exist as active on FICC’s database.</td>
<td>yes</td>
<td>yes - will match the contra ID on the contra-sides record</td>
</tr>
<tr>
<td></td>
<td>Must be different from the Contra ID.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Field</td>
<td>Validation</td>
<td>Mandatory</td>
<td>Comparison</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Trade Type</td>
<td>Identify the type of trade that is entered. Only valid entries are accepted (TNET, TFTD, OPTN).</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Contra ID</td>
<td>Must exist as active account on FICC’s database.</td>
<td>yes</td>
<td>Yes - will match the account ID on the contra-sides record</td>
</tr>
<tr>
<td></td>
<td>Must be different from the Account ID.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Brokers will enter two contra ID’s – one for the sell dealer and one for the buy dealer.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>Any decimal prices (out to nine decimal places) will be acceptable to the system.</td>
<td>yes</td>
<td>Yes – must be exact match for full decimal price entered</td>
</tr>
<tr>
<td>TBA CUSIP</td>
<td>Not valid on TFTD SPT trades. Must be defined as eligible for the trade type on the FICC’s Database.</td>
<td>Mandatory for TNET, Stip and OPTN trades. Optional on SPT trades, if provided it will be ignored by FICC.</td>
<td>yes</td>
</tr>
<tr>
<td>Pool Number or CUSIP Number</td>
<td>Must exist on FICC’s database. Submission of Pool CUSIP or Pool Number is defined by product type.</td>
<td>Must be blank on TNET and Stip trades. Mandatory for SPT trades.</td>
<td>yes</td>
</tr>
<tr>
<td>Pool CUSIP Number agency identifier</td>
<td>Must be either F, R, H, N. If Pool Number is entered, then the agency identifier must be included on the entry.</td>
<td>If Pool Number is entered, then the agency identifier must be included on the entry.</td>
<td>yes</td>
</tr>
<tr>
<td>TFTD Type</td>
<td>On TFTD trades only. Will be one of the following: SPT, Stip, or TBA.</td>
<td>yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Field</td>
<td>Validation</td>
<td>Mandatory</td>
<td>Comparison</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stip Type</td>
<td>In this release FICC will only support variance as a defined Stip</td>
<td>Mandatory for variance stip trades</td>
<td>Yes, if entered</td>
</tr>
<tr>
<td>Buy/Sell</td>
<td>Indicates the direction of the trade from the submitter’s perspective.</td>
<td>yes</td>
<td>Yes, “buy” submitted must match “sell” on contra submission and vice versa.</td>
</tr>
<tr>
<td>Trade Date</td>
<td>Must be less than or equal to the current system date.</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Trade par</td>
<td>The original face of the trade is submitted.</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Settlement date</td>
<td>Must be greater than system date and less than or equal to 999 calendar days forward. Must be a valid business date.</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Expiry date</td>
<td>Must be greater than system date and less than or equal to 999 calendar days forward. Must be a business date. Must be less than or equal to the settlement date.</td>
<td>yes if OPTN is entered</td>
<td>yes</td>
</tr>
<tr>
<td>OPTN type</td>
<td>Only acceptable values are puts or calls.</td>
<td>yes if OPTN is entered</td>
<td>yes</td>
</tr>
<tr>
<td>xref</td>
<td>An identifier, unique at the account level, given by the member to each trade.</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Field</td>
<td>Validation</td>
<td>Mandatory</td>
<td>Comparison</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Commission amt | **Percentage commission expressed as a decimal is the only format supported in the Mortgage Novation Service.**  
Any decimal amount out to 9 decimal places. Must be less than 1. | optional  | Dealer may submit a price either inclusive of the commission rate or submit as settlement price and commission rate. |
| Final Money  | May only be submitted on SPT trades.  
System will overwrite with its calculated price if it differs from the member input price. | optional  | System calculated                                                           |
| Trade level CDR | Not applicable on trades other than TNET.                                    | optional  | no                                                                          |
| Variance     | Stip trades compared with variance will include the variance percentage, for example, “1” in this field will represent a 1% variance on the trade. | Mandatory if a variance stip is entered. | yes, if entered                                                             |
| Execution Time | This will be a member input and will correspond to the time the trade was executed. | Optional on SWIFT-based Interactive Messages and on RTTM Web Front End entries.  
Mandatory (for compliance purposes) on SWIFT-based batch file and file upload formats. | no |
<p>| Trader ID    | Member input to assign the trade to an individual trader.                    | No        | no                                                                          |</p>
<table>
<thead>
<tr>
<th>Field</th>
<th>Validation</th>
<th>Mandatory</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Face (output only)</td>
<td>New field on output messages and on web confirmations. Included in SPT messages.</td>
<td>output only</td>
<td>no</td>
</tr>
<tr>
<td>Interest</td>
<td>Interest component of the final money. System will overwrite with its calculated price if it differs from the member input price.</td>
<td>Optional. FICC will include on outbound messages</td>
<td>no</td>
</tr>
<tr>
<td>Principal</td>
<td>Principal component of the final money.</td>
<td>Optional. FICC will include on outbound messages</td>
<td>no</td>
</tr>
</tbody>
</table>

Trade comparison should be done in a timely fashion. FICC expects trade instructs to be submitted on a real-time basis and will monitor late trade instruct submissions and potentially have different billing rates depending on the timing of the submission.

Any trade instruct that does not meet the criteria laid out above will be rejected by the system. Any trade instruct that meets these criteria will be accepted into the system and will generate a trade advisory out to the counterparty on the message. The trade will also be made available for comparison.

**Trade DK’s**
A DK message is used by either buyers or sellers to notify their counterparties that they do not know or do not agree with the terms of the trade advisory. A DK message can be submitted either via SWIFT-based Interactive Messaging/file or via FICC’s RTTM Web Front End screens.

Regardless of the way the DK is submitted (messaging or web), it must target a ‘live’ uncompared trade instruct that has not previously been DK’ed. DK’s against a compared trade instruct, a previously DK’ed trade instruct or a canceled trade instruct will be rejected.

The DK must contain a reason code to explain to the counterparty why the recipient of the trade advisory has submitted the DK. DK’ing a trade does not preclude it from comparison at a later stage; the DK is for informational purposes only. DK’ing a trade should be done in a timely fashion. FICC expects DK’s to occur on a same-day basis and will monitor late DK submissions and potentially have different billing rates depending on the timing of the DK. Timely DK’s will allow the counterparty time to adjust the record as needed. Changing any business terms on a trade instruct will cause the DK to be removed (see Modify Section of this document). Appropriate messaging will notify the DK’ing party that its DK has been removed due to an update on the record.
DK messages submitted via SWIFT-based Interactive Messaging/file will be validated by FICC and must contain a valid trade identifier and trade terms. If the message fails any of FICC’s validations, the submitter will receive a reject message from FICC. Messages that pass FICC’s edits will receive an accept (ACK) message, and the targeted trade instruct will be updated to a DK’ed state.

DK’s submitted via RTTM Web will be validated online by FICC, and submissions will receive an immediate on screen accepted or rejected response. If the submission is rejected, the reason for the reject will be highlighted on the web screen. It should be noted that while DK’s will be supported by RTTM Web, no “screen input replay” message will be developed for the DK activity type.

Modify
FICC introduced a full ticket modify on uncompared Pool Instructs when it developed Pool Netting. The full ticket modify has proven helpful to web users and, as a result, FICC will develop a full ticket modify of uncompared trade instructs for the Mortgage Novation Service. Post-comparison, members will be able to modify their x-reference only.

Pre-Comparison Modify: Both buyers and sellers (brokers and dealers) will be able to modify their trade instructs if they are in an uncompared state. Members will be able to enter a modify message via both SWIFT-based Interactive Messaging/file and RTTM Web.

When submitting a pre-comparison modify, the member must include a reference number, either its x-ref or the FICC-assigned transaction ID. The uncompared trade instruct must be available for updates, i.e., it must not be canceled or deleted to effect the change of a trade term. Any modify targeting an inactive record will be rejected.

All fields will be available for modification pre-comparison. FICC will perform a full set of validations on the modify message, and the message must pass all validations. Modifies submitted via SWIFT-based Interactive Messaging/file will be rejected via messaging if they do not pass FICC’s validations. If the modify submission does pass the validation process, it will be accepted and the record will be updated. Modifies submitted via RTTM Web will have a series of online edits immediately applied to the input. If any of the modifications fail the edits, the user will receive an online response that describes the reason for the reject. As with messaging, if the RTTM Web modify passes all validations, the record will be immediately updated with the new information.

Broker processing of modifies is similar to the dealer processing of a modify against an uncompared trade. If a business term is changed (e.g., price, par, settlement date, etc.) both dealer advisories will be updated to reflect the change. If the broker changes the contra or commission information, the update will be made to the advisory that was changed; the other advisory will not receive an update (because no changes were made to it).

Post-Comparison Modify Dealer: Post-comparison, the only eligible piece of data that a dealer can modify is the x-ref. As with the pre-comparison modify, the post-comparison modify can be submitted via SWIFT-based Interactive Messaging/file or via RTTM Web.
Post-Comparison Modify Broker: As with a dealer post-comparison modify, the broker post-comparison modify can be submitted via SWIFT-based Interactive Messaging/file or via RTTM Web.

Broker modifies of the compared side of the trade instruct are limited to updating the x-ref field. If the trade is in a PMAT state, the broker may modify the contra and the commission information on the uncomparred side of the trade instruct. Any modifications to the uncomparred trade instruct will result in appropriate messaging being sent to the counterparties, i.e., if the counterparty is changed, the new counterparty will receive an advisory and the original counterparty will receive a cancel message; if the commission is changed, the counterparty to the trade instruct will receive a modification message to notify it of the change.

Post-Comparison Modify Dealer and Broker: FICC will edit any modifies it receives and verify that the only updated data element is the x-ref (or commission/contra on a brokered PMAT trade). Changes to any other trade term will result in a reject of the modify either via SWIFT-based Interactive Messaging/file or via an online response.

FICC will also edit the x-ref for uniqueness. If it fails the uniqueness test, FICC will reject the modify. If it passes, FICC will immediately update the record with the new x-ref.

Trades created out of the TBA netting process will not have an x-ref, but members will be able to modify the trade to add an x-ref if needed. Once the compared TNET trade instruct is included in the netting process at the end of match date, it is no longer available to modify.

The x-ref on a compared TFTD trade instruct is available for modification for the life of the trade.

Trade-level Customer Delivery Request
The TBA netting process will run daily creating a single TBA obligation with FICC against which members will be required to allocate pools or receive pool allocation information from FICC. Generating a single-sided net position (either a buy or a sell by TBA CUSIP and by CSD) limits the number of allocations a member will see to either all receives or all deliveries. However, there may be instances where members have a business need to both receive and send pool information. To allow for such business situations, FICC will provide members with the Trade-level Customer Delivery Request (TCDR) function, which will prevent a compared trade instruct from netting against other trades. It will flow through the netting process and will be aggregated against other trades that have a TCDR applied to them with the same buy/sell direction. This will allow the member to maintain buy and offsetting sell positions when business situations require it.

Once a compared trade instruct has been included in the netting process, it cannot be separated out from the net position. It is the member’s responsibility to assess on match date whether the trade should be TCDR’ed and be allowed to be allocated against or allowed to net. This decision must be made on match date even if the allocation process is many days forward.

1. Example 1: A member executes a buy trade and a sell trade for 10MM and 6MM respectively. On the day the trades are FMAT, the member submits a TCDR on both trades. On allocation day,
FICC will receive allocation information from the member on the 10MM sell trade and will deliver 6MM in allocation information to the member on the buy trade.

2. Example 2: A member executes a buy trade and a sell trade for 10MM and 6MM respectively. On the day the trades are FMAT, the member does not submit a TCDR on either trade. That night FICC nets both trades to a buy of 4MM. On allocation day, FICC allocates 4MM to the member. The member does not deliver any pool information to FICC.

The decision whether to TCDR the trade on match date resides with the member and its allocation philosophy. Those members who wish to minimize allocations will likely not TCDR trades; those members who wish to be involved in the allocation process will need to TCDR trades. Each member must carefully weigh out the advantages versus limitations of the TCDR function for their operations.

The TCDR is a function of netting and consequently is only available on TNET trade instructs. Any TCDR submission that targets a TFTD trade instruct will be rejected by the system because TFTDs are not TBA netting eligible.

Members will have the option to remove a TCDR from a trade instruct at any time to include that par in the end-of-day netting process or make it available for pair-off intraday. (See pair-off section below. Basically, if it is paired-off intraday, it will be removed from the allocation process.)

The TCDR can be applied at two levels by either the buyer or the seller to a trade instruct. An individual TCDR may be applied to a single trade instruct, or a global TCDR can be used to apply TCDRs globally to all trade instructs within a given TBA CUSIP. In both cases, the member will have the option of applying the TCDR through SWIFT-based Interactive Messaging/file or via an RTTM Web entry. When applying a global TCDR, the member will also choose whether to apply it to its buy or sell activity or both (i.e., all trade instructs under the TBA CUSIP).

FICC will not pass the TCDR status of a trade instruct to the contra-side of the trade instruct.

As part of the netting process, FICC will aggregate all TCDR’ed trade instructs into a single position by TBA CUSIP and by CSD. See the description of “Daily TBA Netting” for additional details.

Individual Trade Instruct TCDR and Release: A TCDR can be applied to a trade instruct either at time of submission or as a subsequent action. In both cases it can be done through SWIFT-based Interactive Messaging/file or through the RTTM Web Front End. Submission of a TCDR against a single trade instruct must include a valid identifier. Failure to provide a valid identifier will result in the reject of the TCDR. If the trade is already in a TCDR’ed state and the member submits a second TCDR against the trade, the duplicate TCDR will be rejected by the system. TCDR’s can target any eligible netting-destined trade instruct (i.e., one that is not canceled or marked for deletion); the trade instruct may have either a compared or an uncompared status and it may be versus another dealer or FICC. If the TCDR targets an inactive trade (i.e., one that has been canceled or deleted), the system will reject the input. Accepted TCDR updates will be immediately processed, and the instruct record will be immediately updated to reflect its new status.
Occasionally a member may have a trade with a large par and only wish to TCDR part of the trade. To accommodate this, members will specify the trade targeted by the TCDR, and also will specify the amount of par to be TCDR’ed. If no par amount is specified, then the entire trade instruct will be TCDR’ed. If a par value is specified, it must be in a round million for less than or equal to the open par on the trade instruct (i.e., the par not allocated, not settled and/or not marked for paired-off).

1. Example 1: A member has a trade for 50MM (TID 1). The member wants to TCDR 25MM of the trade. The member sends FICC a TCDR message identifying TID1 in the message and a par amount of 25MM. FICC accepts the submission because it is a round million and less than the open par of the trade.

2. Example 2: A member has a trade for 50MM (TID 2). The member wants to release 4.5MM of a TCDR previously placed on TID 2. The member sends FICC a TCDR message identifying TID 2 in the message and a par amount of 4.5MM. FICC will reject such a submission because it is not a round million.

If the par value submitted on the TCDR record is greater than the open par of the targeted trade instruct, the TCDR will be rejected by the system. As with all rejects, the message returned to the user will provide a reason code containing a description of why the TCDR was rejected. Likewise, if the TCDR is rejected by the RTTM Web Front End, a reject reason will also be provided on the screen.

The TCDR Release can be applied to any trade instruct that has a TCDR applied to it. The target trade instruct must be provided when applying a TCDR Release. As with the application of a TCDR, the TCDR Release can be submitted either via SWIFT-based Interactive Messaging/file or via RTTM Web input. In both cases, FICC will validate that the trade instruct has a TCDR on it and will reject any TCDR Releases that target an invalid trade instruct. The TCDR Release can only be applied to ‘live’ trades; if the TCDR Release targets an inactive trade, FICC will reject the entry.

Like the TCDR submission, the member can release all or part of the TCDR. FICC will validate that the par value specified on the release is in round millions and is less than or equal to the TCDR’ed value on the trade. If not, FICC will reject the TCDR Release with appropriate messaging/web reject and provide an explanation via reason code for the reject.

Releasing a TCDR prior to the daily netting process will make the trade instruct available for the EOD netting.

**Global TCDR:** The term “global,” like in MBSD’s Pool Netting service, is used to describe a type of input where the action is applied to all trades that meet the criteria entered by the member. In this case, when a member enters a ‘global TCDR’ the member will specify the TBA CUSIP and the settlement year and through that single message/entry, a TCDR will be applied to all trades in that TBA CUSIP and settlement year.

A Global TCDR will be submitted either through SWIFT-based Interactive Messaging/file or through the RTTM Web Front End. The TBA CUSIP submitted on the global TCDR submitted via SWIFT-based Interactive Messaging/file must include the full 9 character TBA CUSIP and a settlement year. RTTM
Web Front End submissions will need the TBA CUSIP, the settlement month and year. The check digit is not needed; the system will derive it using the settlement month information. With the Global TCDR, members will specify if it should apply to buy instructs, sell instructs or both.

FICC, upon receipt of a global TCDR, will validate the TBA CUSIP and reject any invalid TBA CUSIPs entered either via messaging or via online response. A reason code will detail the reason behind the reject. Accepted global TCDR’s will immediately update any ‘live’ trade instructs in the specified TBA CUSIP.

Members will be able to subscribe to two levels of messaging responses to the TCDR. They will have the option to: 1) choose to accept one summary message that details the number of trade instructs that were TCDR’ed and the associated par of those messages; or 2) receive one message per trade instruct that is TCDR’ed. In option 1, the trade ID/transaction ID/trade details will not be replayed to the members; they will receive a summary message (e.g., 20 trades were CDR’ed for a total par of 22,000,000.00), whereas in option 2 the entire details of every trade instruct that is TCDR’ed will be replayed to the member.

Message responses to a global TCDR submission will only report newly created TCDR position. If the trade instruct is already in a TCDR status due to an earlier applied TCDR at the individual trade instruct level, then FICC will change the TCDR type to a global TCDR; however, it will not include that trade in the message responses to the TCDR action.

A member can release a global TCDR at any time. This can be done either through SWIFT-based Interactive Messaging/file or via RTTM Web. As with the application of the global TCDR, all trade instructs, pool instructs and pool delivery obligations (see below for additional information on the impact a global TCDR has on pool netting) under the released TBA CUSIP will have the TCDR removed. If the system does not find a global TCDR that matches the TCDR Release, it will reject the TCDR Release either in a response message via SWIFT-based Interactive Messaging/file, or via an online response on RTTM Web. In both cases a descriptive reason for the reject will be provided.

The TCDR will remain in place until either the member deletes it or for as long as the member has open TBA trades or unsettled pools versus FICC for the associated TBA CUSIP and year. Once all obligations to receive/deliver in that TBA CUSIP and year have been satisfied, the global TCDR will be systematically purged from the system.

**CDR Changes for Pool Netting:** The following chart can be referenced when reading this section:

<table>
<thead>
<tr>
<th>Type of Global Action</th>
<th>Trade Instructs</th>
<th>Pool Instructs (PIDs)</th>
<th>Pool Obligations (POIDs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCDR Add</td>
<td>Applied to all</td>
<td>Applied to all</td>
<td>Applied to all</td>
</tr>
<tr>
<td>Applied to TBA CUSIP in trade comparison system</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCDR Release</td>
<td>Removed from all</td>
<td>Removed from all</td>
<td>Removed from all</td>
</tr>
</tbody>
</table>
The global TCDR described above on trades will have a direct impact on pool instructs and pool obligations in the same TBA CUSIP and year. When a member puts in place a trade level global TCDR, it also results in the creation of a global CDR for that TBA CUSIP on all pool instructs (PIDs) and all pool delivery obligations (POIDs) in the pool netting system.

Likewise, if the trade level TCDR is removed, the global pool netting TBA CUSIP CDR will also be removed and will release all pool instructs and pool obligations from the CDR status. If the member wants the global pool netting CDR to remain in place, it must take an action in the pool netting system itself to reapply the TBA CDR to all pool instructs under that TBA CUSIP.

At any given point in time, members can update PIDs/POIDs in pool netting to override the trade level TCDR in place and release the PIDs/POIDs from the CDR status by submitting a TBA CUSIP global CDR Release. It is critical to note that this is a “moment-in-time” action, meaning that it only applies to PIDs/POIDs in the system at the moment the release is executed. As long as the trade level global TCDR remains in place, any newly received pool instructs will fall under the global pool netting TCDR and be CDR’ed. Members should also note that any POIDs generated out of the net as a result of a CDR will carry that CDR status until either the POID settles or the CDR is removed. Any POID created with a CDR on it that is unsettled at the Fedwire close will be fail netted with the CDR status intact. FICC will support SWIFT-based Interactive Messaging/file and RTTM Web Front End additions and removals of CDR’s on POIDs making them eligible for Pool fail netting.

Pool netting will retain its own independent CDR actions. If no trade level TCDR is in place, members will be able to apply a CDR on pool instructs at either the individual or global (pool number or TBA CUSIP) level.

Currently RTTM Web Front End is the only entry point for submissions of pool netting CDRs. As an enhancement to the pool netting service, FICC will develop SWIFT-based interactive message submission of pool netting CDR messages.
Pair-off
A pair-off function will be provided to allow members to maximize the number of FMAT trade instructs that are included in the end-of-day net, thereby reducing allocation events and settlement actions. The pair-off message will indicate to FICC that the trades compared on 48-hour day or later and marked for pair-off will be included in the end-of-day netting process. It effectively excludes targeted trades from allocation and forces them to net. The pair-off message will allow FICC to extend the net beyond the hard and fast cut-off that exists today and will reduce members’ operational risk by eliminating the need to allocate and settle offsetting trades.

The pair-off message can be submitted on any business day; however, its true value is only realized on 48-hour day and beyond. Prior to 48-hour day, FICC will DK any allocations against a trade (i.e., you cannot allocate against a trade prior to 48-hour day) so there is no risk of a trade being allocated against that a member wished to net.

The pair-off message is a function of netting and is therefore only available on netting-destined FMAT trades. It can be applied either via SWIFT-based Interactive Messaging/file or via RTTM Web Front End input. FICC will edit submitted pair-offs for certain conditions and will reject any messages that fail its edits via a SWIFT-based reject message or online responses via RTTM Web Front End.

- Every trade identified in the pair-off must be FMAT.
- Every trade identified in the pair-off must have the same future contractual settlement date.
- The pair-off message must include both buy and sell trade ID’s. FICC will allow one-to-one, one-to-many and many-to-many relationships between the buy and sell trade ID’s. The overall buy trade par must equal the overall sell trade par.
- Every trade identified in the message will be assumed to be for the full open par of the trade. Members will be given the ability to pair off part of the open par of a trade if they specify an amount less than the available open par. If a par amount is specified for a given trade ID, it must be in round millions. If the par specified is not a round million, is greater than the open par on the trade ID or if the sum of all the pars of the buy trades does not equal the sum of the par of all sell trades, then the input will be rejected.

For example, on 48-hour day a member has a short 10MM trade with FICC (TID 1) as the contra-side. Throughout the day, it matches on trades for long 7MM (TID 2) and 5MM (TID 3). The member wishes to minimize its allocations. It submits a pair-off trade with the following information:

<table>
<thead>
<tr>
<th>TID</th>
<th>Side</th>
<th>Par</th>
</tr>
</thead>
<tbody>
<tr>
<td>TID 1</td>
<td>sell</td>
<td>(no par value specified)</td>
</tr>
<tr>
<td>TID 2</td>
<td>buy</td>
<td>5MM</td>
</tr>
<tr>
<td>TID 3</td>
<td>buy</td>
<td>(no par value specified)</td>
</tr>
</tbody>
</table>

TID 1 and TID 3 will be assumed to be the full open par of the trade because no value is specified; FICC will validate that the 5MM specified in TID 2 is less than the open par of the trade. FICC will also validate
that the overall pair-off is flat. In this example, FICC will validate that the 10MM of TID 1 equals the sum of 5MM from TID 2 plus 5MM of TID 3. Because it equals, FICC will accept the pair-off message.

The impact of a pair-off message and TCDR message are opposite. While the TCDR excludes a trade instruct from being netted, the pair-off ensures it will be included in the net. FICC and the Mortgage Novation Working Group determined that if a member submits both actions against the same trade ID, the pair-off message will override the TCDR (i.e., if a trade has a TCDR on it, and if it is subsequently submitted for pair-off, the TCDR status on the trade instruct will be replaced with a pair-off). FICC will include in the Swift-based Interactive Message/file response that a TCDR was overwritten on a given trade ID. Conversely, if a trade has a pair-off on it, any TCDR submitted against that trade will be rejected. (If a member wants to TCDR the trade, the pair-off must first be removed and then it can be TCDR'ed.) Note that a global TCDR request will ignore trades marked for pair-off and there will be no messaging on it.

Any time prior to the end-of-day net, trades that have been marked for pair-off can have that pair-off released. This makes the trades available for allocation, and also will allow the member to submit a TCDR on the trade ID’s. Just as members can submit a message to add a pair-off via SWIFT-based Interactive Messaging/file or RTTM Web, they can submit a message to remove the pair-off via the same methods.

The removal of a pair-off must have both a buy and sell trade ID, or multiple trade ID’s on either the buy or sell side. The pair-off release may be for less than or equal to the par that was originally marked for pair off. A pair-off release undergoes the same edit checks that were applied when the pair-off was submitted, (i.e., FICC will again verify that the contractual settlement dates are the same on all trades included in the message, that the contra-sides are the same, that the pars on the buy and sell sides equal and will also verify that the par amount stated for pair-off removal is less than or equal to the par amount that was originally marked for pair-off). Failure of any of these edit checks will result in the system rejecting the pair-off release either in a SWIFT-based interactive message response or via online edit. In both cases FICC will include a descriptive reason for the reject.

Continuing the example from above, the member now wants to release 5MM from the pair-off process to see allocation information on the position. It will submit the following pair-off release instructions:

<table>
<thead>
<tr>
<th>TID 1</th>
<th>Sell</th>
<th>5MM</th>
</tr>
</thead>
<tbody>
<tr>
<td>TID 2</td>
<td>Buy</td>
<td>5MM</td>
</tr>
</tbody>
</table>

**Cancel Request**

A cancel request is submitted to cancel a previously submitted and still uncomapred trade instruct or, in the case of a compared trade instruct, to generate a notification to the contra-side that the submitter wants to cancel the trade (a compared trade may only be canceled once both sides must submit comparison cancel requests). A cancel request can be submitted either via SWIFT-based Interactive Messaging/file or via FICC’s RTTM Web front end. FICC will validate the terms of the cancel request and either accept or reject it and will provide an immediate response via either SWIFT-based Interactive Messaging/file or an online edit.
The Mortgage Novation Service will institute a series of rules around canceling trade instructs that accommodate daily netting and FICC as the settlement contra-side. Various factors will drive the application of the rules, including the match status of the trade instruct, the timing of the cancel request and its associated trade type. The following sections provide detail on cancel requests.

**Cancel Request and Match Status:** Trade instructs that are in an uncompared status can be canceled by the submitter unilaterally. FICC will validate the submission and, if it is accepted, will immediately cancel the trade instruct and send an advisory cancel to the contra-side.

A trade instruct in a PMAT status must be bilaterally canceled by the compared dealer and broker, meaning that that both parties must identify the targeted trade ID in the cancel request message and both submissions must pass FICC’s edits. Upon receipt of both cancel requests, FICC will cancel the dealer’s compared trade instruct and will cancel the both broker’s compared and uncomparable trade instructs.

A cancel against an FMAT trade instruct requires bilateral submission of cancel requests by both dealers versus FICC as contra-side. Brokers are not required to participate in a cancel of an FMAT trade. Upon acceptance and comparison of both cancel request submissions, FICC will update the record.

**Cancel Requests and Timing:** Due to the daily netting process and the submission of allocations, cancel requests against TNET trades are time-sensitive. Once an FMAT TNET trade has been included in the netting process it cannot be canceled. If the trade is not bilaterally canceled by the end-of-day cutoff, it will be included in the net and both parties must submit an offsetting (reverse) trade the next day to negate the effect that the targeted trade had on the net position.

Because PMAT and Uncompararable TNET trades are not included in the end-of-day net (see Daily Netting section), they can be cancelled (with certain limitations) after the end-of-day process has run.\(^\text{13}\)

Once a TNET trade can be allocated against (i.e., once that trade’s 48-hour day has been reached) it will not be available for cancellation (i.e., if a trade is fully compared on or after 48-hour day, members should submit an offsetting trade and immediately mark both trades for pair-off to prevent allocations against them).

If a TFTD is uncompared, i.e. it is not PMAT or FMAT, it is available for cancelation at any time. This applies to all TFTD trade types (TBA, Stip and SPT).

A PMAT and FMAT TFTD TBA Trade can be canceled up to the point that the position is allocated. Once the position has been allocated it cannot be canceled. FICC will manage TFTD TBA trades with the same terms as an aggregated position rather than individual trades. This will provide members the maximum opportunity to cancel a trade; however, once the position has been allocated, members will not be able to cancel a trade.

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\(^{13}\) PMAT TNET trades cannot be canceled on 48hr if they have been allocated against.
Example 1: Member A has three trades with the same terms for a total par of 1.5MM (each trade is 500,000) against Member B. Member A allocates 500,000. FICC reduces the unallocated position to 1,000,000. It does not assign the allocation to a specific Trade ID. Member A submits a cancel request against TID 1. Because FICC allocated against a position rather than a specific trade, TID 1 is available to have a cancel request processed against it.

Example 2: Member A has three trades with the same terms for a total par of 1.5MM (each trade is 500,000) against Member B. Member A allocates three pieces of 500,000. FICC reduces the unallocated position to zero. Member A submits a cancel request against TID 1. Because the unallocated position is now zero, the cancel request will be rejected by the system (i.e., there is no position left to cancel).

If the trade was compared in error, members should submit an offsetting trade and an offsetting allocation to target the erroneous trade and allow pool netting to flatten the position.

TFTD Stip and SPT trades can be canceled up until the actual settlement of any or all pools against the trade. If a cancel request is accepted, any allocations against TFTD Stip trades will be undone. FICC will DK the allocation to the selling dealer following the cancel of the TFTD Stip trade and will deliver a cancel of the allocation to the buy dealer. EPN will be used to deliver the DK and the cancel messages. If a Stip or SPT trade has been partially settled it cannot be canceled. However, FICC recognizes that in rare circumstances members may have entered into such a trade erroneously but only discover the issue following partial settlement of the trade. To account for such events FICC will build a web-only function that will allow members to enter an offsetting trade and will allow members to mark this offsetting trade and the unsettled portion of the original trade as “paired off.”

In any of the above cases where the cancel request functionality is not available, if the member submits a cancel request against a trade, FICC will reject it with an appropriate reason code. If the message was submitted via SWIFT-based Interactive Messaging/file, the reject will be delivered via a SWIFT-based interactive message response. If the cancel request was entered via RTTM Web, the user will receive an immediate online response.

<table>
<thead>
<tr>
<th>Trade Type</th>
<th>Timing</th>
<th>Cancel Request Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>TNET</td>
<td>Prior to 48 hr day, prior to EOD Process</td>
<td>Both members can submit a cancel request and FICC will cancel the compared record.</td>
</tr>
<tr>
<td>TNET</td>
<td>Prior to 48 hr day, post EOD Process</td>
<td>Both members must submit a reversal trade.</td>
</tr>
<tr>
<td>TNET</td>
<td>48 hr day and beyond</td>
<td>Both members must submit a reverse trade, mark both for pair-off or allow pool netting to net away allocated pools.</td>
</tr>
<tr>
<td>Trade Type</td>
<td>Timing</td>
<td>Cancel Request Availability</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TFTD TBA Trade</td>
<td>Prior to 48 hr day, prior to EOD Process</td>
<td>Both members can submit a cancel request and FICC will cancel the compared record.</td>
</tr>
<tr>
<td>TFTD TBA Trade</td>
<td>48 hr day and beyond</td>
<td>If the position has not yet been allocated against, both members may submit a comparison cancel request and FICC will cancel the trade. If the position has been allocated against, both members must submit a reversal trade, allocate against it and submit pools allocated to pool netting to net them away.</td>
</tr>
<tr>
<td>TFTD Stip or SPT trade</td>
<td>Prior to settlement of any portion of trade</td>
<td>Both members can submit a cancel request and FICC will cancel the compared record.</td>
</tr>
<tr>
<td>TFTD Stip or SPT trade</td>
<td>From the point of trade instruct submission</td>
<td>The trade can be canceled any time prior to settlement of part or all of the trade.</td>
</tr>
</tbody>
</table>

Reconciliation Message
FICC is investigating the development of a reconciliation message where users’ systems will be able to query on trades/positions held at FICC. FICC welcomes feedback from members on the usefulness of such a message and what type of data would be best made available to members.

Elimination of Messages
FICC is currently undergoing a study to determine if it can streamline its message response processes. Members have indicated that certain actions do not require the full level of message responses. For example, if a trade is compared, a match message may be enough to notify members to take two actions: mark the trade as compared and cancel the comparison request (currently FICC sends two messages to make this happen). Because messaging processing is costly for members, any streamlining of the process will be beneficial to members. The messaging specifications document will outline the outcome of this study.

5. FICC Edits and Validations on Allocations
FICC will validate allocation messages for completeness and accuracy. It will validate the trade terms submitted on allocations against the corresponding trade details in RTTM. On allocations against TNET trades, TFTD TBA trades and TFTD Stip trades compared with a variance stip, FICC will validate the pool
details for satisfaction of good delivery guidelines. On any other TFTD Stip trade, FICC will validate that the pool number is good for delivery against the TBA CUSIP of the trade but will require the buyer to validate that the pool satisfies the terms of the trade.

The following table illustrates the types of edits and validations FICC will execute on allocations.

<table>
<thead>
<tr>
<th>EPN Field</th>
<th>Comparison Criteria</th>
<th>System action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitter</td>
<td>Must match the seller on the trade in RTTM. On outbound messages to buyers this will read FICC.</td>
<td>If does not match, DK the allocation.</td>
</tr>
<tr>
<td>Contra</td>
<td>FICC will be the contra on all allocations against FICC guaranteed trades. On outbound messages this will read the buy account symbol.</td>
<td>If does not match, DK the allocation.</td>
</tr>
<tr>
<td>TBA CUSIP</td>
<td>Must be 9 characters and must match the trade in RTTM.</td>
<td>If not, DK the allocation.</td>
</tr>
<tr>
<td>Original Trade Par</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Price</td>
<td>Must match the full price on the trade in RTTM. The current tolerance for pricing differences out past the 6th decimal place will not be supported on allocations against FICC; prices must be an exact match to the RTTM price. The outbound message will contain the full price out to the 9 decimal places.</td>
<td>DK if the price is not the full RTTM price.</td>
</tr>
<tr>
<td>EPN Field</td>
<td>Comparison Criteria</td>
<td>System action</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Good Delivery Millions</td>
<td>FICC will not validate. The pool details will be validated independent of what is entered in this field. On outbound messages, enter the number of GDM’s in the message. If a combination of GDM lots and odd lots are included in the message, enter the number of GDM’s in the message.</td>
<td>NA</td>
</tr>
<tr>
<td>Trade Date</td>
<td>On all inbound TNET trades, enter either the net date or, if compared on allocation day, the allocation date. On all inbound TFTD trades enter the original trade date.</td>
<td>DK if an invalid date format is used.</td>
</tr>
<tr>
<td>Settlement Date</td>
<td>It must be accurate for the trade/position’s CSD.</td>
<td>DK if inaccurate.</td>
</tr>
<tr>
<td>Delivery Date</td>
<td>On TNET allocations or TFTD TBA allocations it must be greater than or equal to two business days out. Must be valid for the T2 time in the message (i.e., if the T2 is &lt;15:00:00 can be 2 days or greater, if =&gt;15:00:00 must be 3 days or greater. Next day delivery is allowed on TFTD Stip trades</td>
<td>Errors in DD are grounds for a DK.</td>
</tr>
<tr>
<td>Internal id</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Subaccount id</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Reason code</td>
<td>Used on DK messages, optional on CC and CX messages. Mandatory on outbound CX messages created by FICC to a buyer where FICC received a valid DK on a TNET allocation.</td>
<td>EPN will reject if it’s missing on DK messages.</td>
</tr>
<tr>
<td>EPN Field</td>
<td>Comparison Criteria</td>
<td>System action</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Target message ID</td>
<td><strong>Must be provided on DK &amp; CC messages from buyers as previously defined.</strong> FICC will always include on DK messages to sellers and on CX messages sent from FICC. It must be included on a cancel and correct.</td>
<td>Include on DK messages back to sellers.</td>
</tr>
<tr>
<td>Xref</td>
<td>N/A</td>
<td>NA</td>
</tr>
<tr>
<td>Pos Dup</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Special Instructions</td>
<td>N/A</td>
<td>NA</td>
</tr>
<tr>
<td>Number of pools</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Lot ID</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Pool Number</td>
<td>Must be valid for the TBA CUSIP.</td>
<td>If not, DK the message.</td>
</tr>
</tbody>
</table>
| Original Face       | **TNET and TFTD TBA trades:**  
Must follow good delivery guidelines.  
**TFTD Stip trades:**  
The original face must be a good deliverable value.  
Variance stips must follow good delivery guidelines. | If not, DK the message.                                                                           |
| Coupon              | FICC will ignore.                                                                                                                                                                                                   | NA                                                                                                |
| Maturity Date       | FICC will ignore.                                                                                                                                                                                                   | NA                                                                                                |
| New Issue           | FICC will ignore.                                                                                                                                                                                                   | NA                                                                                                |
| Trade Number        | This field identifies the RTTM trade ID.                                                                                                                                                                          | On TFTD Stip trades either this field or control # field must be completed with valid data.  
If both Trade number and control number are provided and do not match the same trade, the trade number will be used to identify the targeted trade. |
<table>
<thead>
<tr>
<th>EPN Field</th>
<th>Comparison Criteria</th>
<th>System action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Number</td>
<td>This field identifies the RTTM trade x-ref.</td>
<td>On TFTD Stip trades either this field or Trade # field must be completed with valid data.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Similar to SWIFT message, if both Trade number and control number are provided and do not match the same trade, the trade number will be used to identify the targeted trade.</td>
</tr>
<tr>
<td>Current face</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Factor</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>CUSIP Number</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Issue date</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Terminator</td>
<td>Use to identify lots. During autoflip it will be used to reduce the open par on the position. Must insert correct terminator on outbound message.</td>
<td>Validate for correctness. If it does not follow EPN guidelines for terminators, DK the message.</td>
</tr>
<tr>
<td>Principal</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Interest</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Net Money</td>
<td>FICC will ignore.</td>
<td>NA</td>
</tr>
<tr>
<td>Special Instructions</td>
<td>FICC will ignore Turn as received on Stip trades.</td>
<td>NA</td>
</tr>
</tbody>
</table>

### 6. Conversion Plan

Mortgage Novation represents a significant change to the daily operations of the MBS market. Consequently, FICC and the working group have determined that implementation of the service should be done on a TBA CUSIP-by-TBA CUSIP basis. FICC plans to activate the service in a “big bang” fashion, meaning that although TBA CUSIPs will be turned on one-by-one, all members must be ready to participate in the Mortgage Novation service in that TBA CUSIP at the same time (member should build this flexibility into their systems).

As CUSIPs are selected for conversion to the Mortgage Novation service, FICC will modify all SBOD activity with forward settling dates to TNET trades on the night before that TBA CUSIP is set to begin TNET servicing. All TFTD SPT trades will be left as they are and, once they go through the first end-of-day process, FICC will become the settlement contra-side. TFTD TBA activity will all be converted to TFTD
Stip. As TBA CUSIPs become eligible for Mortgage Novation servicing, the management of MTM will follow the process laid out earlier in the document. Members should therefore anticipate changes in their clearing fund to account for the movement of MTM from inclusion in clearing fund calculations to becoming a cash pass-through event. FICC will provide members with estimates of these changes prior to conversion of TBA CUSIPs to the Mortgage Novation Service.

As we move along in the project, FICC will provide additional detail on the conversion steps.

7. Next Steps/Timeline
FICC’s next step is to take the business definition of the project and create the associated technical documentation. As part of that process, additional questions may require input from FICC’s members and, when needed, FICC will convene its various working groups to gather answers to these questions.

Towards the beginning of 2012, FICC intends to publish the SWIFT-based Interactive Messaging/file specifications document that members can use to develop the messaging required to support this initiative. Following publication of that document, FICC will publish the machine-readable output specifications document that will contain the details of the MRO output that FICC will deliver to support this service. Members should look for the MRO document in Q3 of 2012.

FICC expects to make the system available for testing by all members in Q3, 2013, with a production implementation in Q4, 2014.

Any questions on this document can be directed to:

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George Parasole 212-855-7670 gparasole@dtcc.com

FICC is, as always, looking for input and comments from members and appreciates feedback on this proposal from all members and interested parties.
Appendix A: Trade Flow

TYPICAL LIFE CYCLE of a TBA TRADE

TRADE EXECUTION, MATCHING & NOVATION

BUYER SELLER BUYER SELLER
TBA TRADE TRADE-for-TRADE

FICC RTTM®: Trades are submitted to RTTM and matched and novated.

TBA NETTING
Netting occurs daily at end-of-day.

FICC NETTING: FICC runs TBA Netting on matched TBA trades and generates net TBA obligations.

“48-Hour Day”

TBA OBLIGATIONS

TBA BUY TBA SELL

FICC RTTM®: Members can submit pool information to RTTM, however it is not required. EPN will submit the allocations to Pool Netting real-time.

POOL ALLOCATION

POOL COMPARISON

Selling pool information

POOL INSTRUCTS

POOL INSTRUCTS

FICC EPN

MATCHED POOLS

“24-Hour Day”

POOL NETTING

Pool Netting runs daily.

FICC NETTING: FICC runs Pool Netting and generates obligations to settle versus FICC. The net will begin after the Fedwire closes.

Contractual Settlement Day

DELIVERY vs. PAYMENT SETTLEMENT

SPTs and STIPs are not eligible for TBA Netting or Pool Netting but will still settle versus FICC.

FICC @SETTLEMENT BANK

Fail Netting is not reflected in this diagram.