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CORPORATE, MUNICIPAL, AND UIT (CMU)

FREQUENTLY ASKED QUESTIONS FOR REAL-TIME TRADE MATCHING (RTTM) PROCESSING FOR CMU TRADES

VERSION 1.1

FEBRUARY 22, 2019

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CUSTOMERSUPPORT

Who do I contact for CMU questions?

For CMU matching questions, enter an inquiry into the DTC PBS WINS system or call (888) 382- 2721. Select option 2 (Equity & Fixed Income), and then select option 3 (Equity, CNS, OW & CMU).

For RTTM Web Password resets, see [Password resets for RTTM Web](#).

For problems with data communication or RTTM Web access, see [Inability to access RTTM Web](#).

PASSWORD RESETS FOR RTTM WEB

How can I get my password reset for CMU RTTM Web?

If you are not a super access coordinator (SAC) or access coordinator at your firm, contact your firm's access coordinator to reset your password.

If you are a SAC or access coordinator for your firm, call the Customer Support Center (CSC) at 1 888 382-2721 and press 1 (Password Issues), then 3. You can also refer to the CMU RTTM Web User Guide available at <http://www.dtcc.com/clearing-services/ficc-cmu/ficc-cmu-user-documentation>.

SETTING UP NEW RTTM WEB USERS

As an RTTM Web Access Coordinator, how can I set up a new user?

You can set up a new user by clicking the Site Administration tab on RTTM Web. From there, click **User Security > Add User**.

INABILITY TO ACCESS RTTM WEB

Why can I not connect to CMU RTTM Web?

Call the Customer Support Center at 1 888 382-2721. Select 5 (Technical Issues), then 5 (FICC Connectivity and Technical Support).

MQ TRADE PROCESSING

Why is RTTM is not processing my trade messages sent via MQ?

Call the Customer Support Center at 1 888 382-2721. Press 5 (Technical Issues), then then 5 (FICC Connectivity and Technical Support).

You can also check for a larger issue: In the event of a system-wide problem, RTTM Web displays a banner on its front page.

RTTM DOCUMENTATION AND TRAINING INFORMATION

Where can I find information about CMU RTTM services?

Visit <http://www.dtcc.com/clearing-services/ficc-cmu/ficc-cmu-user-documentation> for more information, including:

- FAQs
- CMU RTTM Interactive Messaging Specification
- CMU RTTM Web Manual
- CMU RTTM Print Image Activity Reports (Contract Sheets)
- MSRB Special Condition Indicators

Where can I find FICC CMU important notices?

Visit <http://www.dtcc.com/legal/important-notices?subsidiary=FICC+-+CMU&pgs=1>

How can I obtain training for CMU RTTM?

Contact your DTCC Relationship Manager

ROLES OF DTCC AND SUBSIDIARIES WITH RTTM PROCESSING

What are the roles of the National Securities Clearing Corporation, Fixed Income Clearing Corporation, and The Depository Trust & Clearing Corporation relative to RTTM?

NSCC and FICC are wholly owned subsidiaries of DTCC. CMU processing is provided for under the Rules and Procedures of NSCC. Visit <http://www.dtcc.com/legal/rules-and-procedures.aspx?subsidiary=NSCC&pgs=1>

Matched CMU trades settle in NSCC's CNS (Continuous Net Settlement) or Trade for Trade systems as applicable.

Note:

Cash (T/D = S/D) trades are matched as **Comparison Only** by RTTM and are not sent to NSCC's settlement systems).

TRADE SUBMISSION

What Types of securities are ineligible for CMU RTTM?

Trades in non CMU securities are ineligible for CMU RTTM. CMU RTTM will reject in the following DTC Sub Issue Type (SITs):

SIT	Number
Common Stock	010
Convertible CMN STK	011
Common Stock REIT	012
Preferred Stock	020
Preferred Stock REIT	022
Convertible PFS Stock	023
Tender Rate Preferred	024
Limited Partnership	030
CMO Units	040
ARPS	102
ADRs	110
Depository Shares	111
Exchange Trade Funds	117
Equity 144a Designated	121
Sealed Envelope	125
Custody User CUSIP	126
REIT	130
GNMA	450
GNMA Pass Through	451
GNMA Serial Note	452
CMO-GCMO	540
ABS-GABS	541
Government Security	601
US Treasury	610
US T Bill	611
US T Note	612

SIT	Number
Government Agency	620
PTC (REMIC)	651
Equity Derivative	705
Warrant	720
Right	730
Mutual Fund	760
Closed End Funs	761
IMM/ Fund	762
Equity Unit	780
Debit Unit	781

In what format can CMU trades be submitted to RTTM?

Trades can be submitted via RTTM Web or MQ Interactive Messaging (MT515) trade input messages using ISO (International Organization for Standardization) 15022 formats.

Message specifications for MT 515 (Input to RTTM), MT 509 (Trade Status Messages), and MT 518 (Trade Advisories) are available at <http://www.dtcc.com/clearing-services/ficc-cmu/ficc-cmu-user-documentation>

In what format is the trade value submitted to RTTM?

Regular way trades can only be submitted versus final money. Accrued interest is included in the final money. The accrued interest also needs to be reported separately on trade input.

For example, a trade with principal money of \$10,000 and accrued interest of \$100 would be reported with final money of \$10,100. Accrued interest would be reported separately as \$100.

When-issued and syndicate takedown trades can be submitted with final money, price to yield/concession, or dollar price. RTTM will calculate trade monies for yield and dollar price submissions.

What is the purpose of the Trade Reporting indicator (on RTTM Web) or Trade Destination (on MT 515 messages)?

Firms populate this field to instruct RTTM to report the trade to the MSRB or not to report to MSRB.

On RTTM Web, selecting RTTM & MSRB in the Trade Reporting indicator field instructs RTTM to attempt to match the trade and also to report it to the MSRB. This is the usual setting for municipals. However, if the municipal transaction is a Stepout this field should be populated with RTTM (not RTTM & MSRB): stepouts should not be reported to MSRB as trades.

The Trade Reporting Indicator is a Matching field in CMU RTTM. See this Important Notice regarding Municipal Bond Stepout processing: <http://www.dtcc.com/~media/Files/pdf/2016/3/16/a8179.pdf>

For more information about MT 515 messages, see the NSCC Real Time Messaging Specification available at: <http://www.dtcc.com/clearing-services/ficc-cmu/ficc-cmu-user-documentation>

Municipal Stepouts on MT 515 messages should be coded as Destination code 01 (RTTM). Non Stepout Municipal Interdealer trades should be coded as Destination 01 (RTTM)/02 (MSRB).

Is the XREF # required on trade input?

The XREF # or cross-reference number is one of several fields required on trade instructs.

Required fields include XREF #, Participant #, Contra Participant #, Buyer's and Seller's Correspondent symbols (aka Market Participant IDs -MPID), Buy/Sell Code, Marketplace of Execution, CUSIP, Quantity, Money, T/D, and Settlement Date. Trades submitted without an XREF # will be rejected.

The XREF # is your firm's unique internally generated trade reference number. It is also provided back to participants upon trade output from RTTM to help firms account for each trade.

What are the basic matching elements on a trade?

The basic matching elements are Buy/Sell Code, Quantity, Money, Contra Clearing Participant, Marketplace of Execution, Settlement Date, Buyer's and Seller's Correspondent symbols (aka Market Participant IDs -MPID), CUSIP, and Trade Reporting Indicator.

Do I need to report my or my introducing broker's MPID (FINRA market participant ID symbol) and my contra party's MPID on trade input?

Yes, MPIDs must be submitted. In addition, these fields are part of the RTTM match for all CMU RTTM trades.

If you report an Interdealer trade to the MSRB, MPID is required in their systems. The MPID also helps firms clearing on behalf of others to identify which of their correspondents may have executed the trade with you. Firms must provide this information about their trade input or the trade will reject.

What are Trade Instructs, Modifies, Cancels, Reversals, and DKs?

Trade Instruct: Submits initial or as-of trade data to RTTM.

Modify: Changes a data element (Quantity, Contra, \$, T/D, S/D, etc.) on a previously submitted trade.

Matching elements (except for CUSIP and Marketplace) can be modified if a trade is unmatched. Regulatory data elements, such as time of trade, can be modified in RTTM as long as the trade is active in RTTM (generally through settlement date). Note that you can only modify a matching element on an unmatched syndicate trade on initial trade submission date.

Cancel: Removes an unmatched trade from RTTM.

Reversal: Offsets a previously matched trade; for instance, a firm that matched a buy trade in error submits a sell and includes the reversal indicator on the sell trade's submission. Note that RTTM does not perform a lookup to ensure that the original trade had previously matched.)

DK: Informs the contra side that you do not know a trade. DK'ing is optional for bilateral regular way and when issued (WI) trades. Note that these trades will drop from the system if you do not match them within two days after the contra side submits against you. However, on syndicate trades that you do not know, you need to submit a DK to prevent RTTM from automatically matching the syndicate trade. The syndicate trade will automatically match two days after the syndicate manager submits a syndicate sell (see "Syndicate processing for municipal securities") if you do not DK the trade.

What is the time frame for the CMU Trade Input Extension?

CMU closes its daily processing at around 8:00 P.M. Eastern Time. If a firm requires an extension for their trade input to be processed on the current business day, they need to call the DTCC Hotline at 1 888-382-2721 (select option 5, and then 4) by 7:30 P.M. Eastern Time to request an extension. If a firm calls for an extension between 7:30 P.M. and 7:45 P.M., DTCC will make a best effort to provide one. No extensions will be issued beyond 8:30 P.M.

WHEN-ISSUED TRADE MATCHING PROCESSING

How does RTTM determine if a trade will be processed as When Issued (WI) or Regular Way?

RTTM determines whether the trade is processed as WI or Regular Way.

Trades are processed as WI if they are executed 3 or more days before the initial settlement date of a new issue. *(Effective 9/5/17 when T+2 becomes the standard settlement cycle this becomes 2 or more days.)*

Trades are processed as Regular Way if they are:

- Submitted to RTTM on or after the initial settlement date of a new issue.
- Executed 1 or 2 days before the initial settlement date and settle after the initial settlement date
 - *(Effective 9/5/17 when T+2 becomes the standard settlement cycle this becomes 1 day.)*

An exception to this rule includes trades submitted one or two days prior to the issue's initial settlement date, which are coded as **extended** settlement trades and are coded to settle after the issue's initial settlement date. These submissions are treated as **WI** even though they settle after the initial settlement date.

How can firms submit trades to RTTM in Municipal WI securities?

RTTM allows firms to submit trades in WI securities with:

- Final money (settlement date must be provided on trade input)
- Yield/concession (settlement date should not be submitted, RTTM will derive it)
- Dollar price (settlement date should not be submitted, RTTM will derive it)

Why would a WI trade be assigned a Memo status?

A trade is placed in Memo status if:

- CMU RTTM knows a security as WI
- Trades in that security are submitted with final money (as opposed to dollar price or yield)
- The underwriter has not provided the initial settlement date for the security to DTC

The trade will remain in a Memo status for three days (submission date and the following 2 days). If RTTM receives the settlement date within the three days, the trade's Memo status will be removed and the trade will be made eligible for matching.

If the settlement date is not provided by trade submission date + 2, the trade will be purged at end-of-day on submission date + 2 and will appear on the RTTM Purge Report.

If the initial settlement date for the security is provided by submission date + 2 (which normally removes the trade's Memo status and makes it eligible for matching), but the initial settlement date provided to RTTM for the issue does not match the settlement date a participant submitted on the trade, the trade will be purged for Security Detail Differences and appear on the RTTM Purge Report.

Why would a WI trade be assigned a Pending status?

A trade is placed in a Pending status if a firm submits dollar price or yield (as opposed to Final Money) and RTTM does not have security master file information about the CUSIP. Dollar price or yield submissions are only accepted for WI trades. In effect, the participant is indicating this is a WI trade when it submits dollar price or yield. RTTM will pend the trade intraday on submission date.

If RTTM is provided a security master file update by end-of-day to designate the security as WI, the trade will be removed from Pending status and made eligible for matching. If RTTM does not receive a security master file update by end of day, the trade is purged and will appear on the RTTM Purge Report.

SYNDICATE PROCESSING FOR MUNICIPAL SECURITIES

What is the difference between RTTM Syndicate processing and RTTM secondary WI Non-Syndicate processing?

Syndicate trades are considered "Demand" trades in RTTM. Demand trades require that only one party submit in order for the trade to become matched. Secondary WI trades, on the other hand, are considered bilateral trades within RTTM and require both the buyer and the seller to submit.

The syndicate manager (seller) is required to submit syndicate trades to RTTM, designating them as syndicates, versus the syndicate member (buyer).

The syndicate member has the option of submitting a syndicate buy target trade. (See "What is the difference between a syndicate trade and a syndicate target trade?") However, note that trade submission by the syndicate manager is required to cause the trade to be matched in RTTM.

On RTTM Web trade input, the syndicate manager should specify **Syndicate** in the Trade Type field. The syndicate member who elects to submit a syndicate buy trade should specify **Syndicate target**.

Firms submitting MT 515 messages instead of RTTM Web input should refer to CMU February, 2016 Interactive Messaging: NSCC Participant Specifications for Matching Input and Output Version 2.0 to determine how to code syndicate trades. Include a TRDC subqualifier in the Transaction Type entry on the MT 515 message for syndicate trades.

A trade designated as a syndicate must be submitted prior to a new issue's initial settlement date.

What is the difference between a syndicate trade and a syndicate target trade?

A syndicate trade is submitted by the syndicate manager (sell side). A syndicate target trade can be submitted by syndicate members (buy side) but is optional. Note that syndicate members may want to consider submitting syndicate target trades to enter their version of MSRB regulatory data (such as Time of Trade and MPID) rather than relying on the syndicate manager to properly enter this data.)

A syndicate sell trade submitted by the syndicate manager is not marked as **Matched** in RTTM until submission date +2 if the syndicate member does not submit a syndicate buy target trade. However, if a syndicate target buy trade is submitted by the syndicate member, the syndicate trade will be marked Matched

as soon as the syndicate sell trade submitted by the syndicate manager matches the syndicate buy target trade.

A syndicate trade will not match if it is DK'd by the syndicate member or canceled by the syndicate manager. Note that on NSCC's End of Day Machine Readable Contract File, syndicate trades are always marked **Compared** unless they are canceled in RTTM by the syndicate manager or DK'd in RTTM by the syndicate member.

How should trade corrections on syndicate trades be processed?

If a syndicate member (buyer) does not know a syndicate trade submission from the syndicate manager (seller), the syndicate member can submit a DK in RTTM to remove the trade. A DK can be submitted if the syndicate trade is still unmatched.

If the syndicate manager (seller) submitted a syndicate trade in error, it can modify the syndicate sell, provided it is still unmatched (i.e., a syndicate buy target trade has not been submitted to match it) and modification is made before end-of-day on trade submission date.

The syndicate manager can also remove the trade by submitting a cancel. The manager can then resubmit another trade. The syndicate trade must be unmatched to be eligible for cancellation.

If the syndicate trade has matched, a reversal is needed to correct the trade. The syndicate manager needs to submit a syndicate buy and, on RTTM Web, type Yes in the Reversal Indicator field. On MT 515 message input, the RVSL code must be used.

OVERALL TRADE MATCHING QUESTIONS

Why did my RTTM trade reject?

RTTM trade rejects can be viewed on the RTTM Web main page by clicking Trade Rejects. A reject reason is displayed for each rejected trade. Typical rejects include Invalid Contra, CUSIP, or Settlement Date. RTTM also sends a real-time MT 509 reject trade message to the submitter.

How can I view my unmatched trades?

Unmatched trades represent your trade submissions for which the contra party has not submitted matching trade details. You can view your unmatched trades on the RTTM Web main page by clicking **Unmatched**.

You can also click **CMU Trade Search Engine** on the right side of the main page and enter the unmatched trade parameters you wish to use for your search.

How can I view my advisories?

Advisories represent trades submitted by your contra party that you did not submit in return. You can view your advisories on the RTTM Web main page by clicking Trade Advisories.

You can also click CMU Trade Search Engine on the right side of the main page and enter the advisory parameters you wish to use for your search.

How do I access my end-of-day RTTM Reports?

On the CMU RTTM Web main menu, click the Report Center tab.

When can I modify a trade?

You can modify a matching field (except for CUSIP and Marketplace) in RTTM on a bilateral trade (non-syndicate) at any time, provided the trade is still unmatched. Syndicate Unmatched trades can be modified on submission date only.

Regulatory fields such as Time of Trade and Participant Capacity can be modified in RTTM after submission date, as long as the trade is still in the RTTM system (typically, until the trade's settlement date). The trade does not have to be unmatched to modify a regulatory field.

How do I use the Extended Settlement Days field for a regular way trade?

Do not use the Extended Settlement Days field for regular way trades. Instead, submit the trade date and settlement date **without** a separate entry for the number of days beyond the normal settlement cycle.

How do I use the Settlement Date Adjustment subqualifier on an MT 515 trade message or the Extended Settlement field on RTTM Web?

It is not necessary to use the Settlement Date Adjustment subqualifier on RTTM MT 515 trade messages or the Extended Settlement field on RTTM Web for regular way trades. For example, if trade date is Monday, June 5, 2017 and settlement date is Friday, June 9, 2017 (four-day settlement cycle), enter a trade date of 6/5/17 and a settlement date of 6/9/17 on the trade input. There is no need to enter 1 to extend the settlement date by one day.

The Settlement Date Adjustment subqualifier on RTTM MT 515 trade messages or Extended Settlement field on RTTM Web should be used for When Issued (WI) trades executed before an issue's initial settlement date, **submitted with dollar price or yield**, and settling after the deal's initial settlement date. It is rarely used.

Also, the Settlement Date Adjustment subqualifier on RTTM MT 515 trade messages or Extended Settlement field on RTTM Web should be used for WI trades that are executed before new issue initial settlement date – 2, **are submitted with final money**, and have a settlement date later than the new issue's initial settlement date. It is rarely used. (*Effective 9/5/17 this becomes settlement date -1*).

*Example: The initial settlement date (aka Issue Date) on a new WI muni security is 6/8/17. Your trader executed a trade on 5/16/17 for settlement date 6/9/17. In this case, you need to enter 1 in the Settlement Date Adjustment subqualifier on RTTM MT 515 trade messages or in the Extended Settlement field on RTTM Web. **If you submit final money for this trade, you must submit the 6/9/17 trade settlement date along with a one-day extended settlement indicator.***

How should Municipal bond Stepout transactions be processed?

Firms have the option of submitting transactions to RTTM that are not the result of a purchase-sale transaction, such as deliveries of securities to satisfy an investment advisor's allocation instructions. If the Municipal transaction is not a dealer-to-dealer trade, the trade should not be reported to MSRB.

Firms should therefore use RTTM Destination 01 on the MT 515 trade message or use '**RTTM**' (not '**RTTM and MSRB**') on RTTM Web's input screen.

The RTTM Destination (01 for Stepout Municipal) or 01/02 for non Stepout Municipal bond trade) is a matching element.

For Corporate Bond and UIT trades, the RTTM Destination should always be 01.

For more information, see the following NSCC Important Notice:

<http://www.dtcc.com/~media/Files/pdf/2016/3/16/a8179.pdf>

OTHER MATCHING QUESTIONS

What is the RTTM Money Tolerance?

If the buyer and seller submit trade data that matches in all required aspects other than trade value, the trade will match under certain circumstances (that is, with a "money tolerance").

If a trade is uncomparing after the intraday comparison process, for Bilateral trades it will be compared using the seller's contract amount if the amounts are within:

- A net \$10.00 difference for trades of \$250,000 or less
- \$0.04 per \$1,000 for trades greater than \$250,000

(For Syndicate Takedown and QSR trades, the Syndicate Manager's or QSR's submitted money is always used to resolve minor money differences.)

These trades will appear on the end-of-day RTTM Enhanced Match Report as well as the RTTM activity reports (Contract Sheets).

Intraday, RTTM will immediately match trades using the seller's contract amount if the contract amounts are within:

- A net \$2.00 difference for trades of \$1 million or less
- \$2.00 per million for trades greater than \$1,000,000

These trades will appear on the end-of-day RTTM Enhanced Match Report as well as the RTTM activity reports (Contract Sheets).

What other trade tolerances does RTTM apply?

If all RTTM trade matching details are the same except for trade date, RTTM will match the trade and use the earlier trade date as the matching trade date. These trades will appear on the end-of-day RTTM Enhanced Match Report as well as the RTTM activity reports (Contract Sheets).

How do I enter a cash settlement trade?

Simply enter the trade date and settlement date. RTTM will automatically designate cash trades (T/D = S/D) as **Comparison Only**. Comparison Only trades are not sent to NSCC's settlement systems and do not appear on the NSCC Consolidated Trade Summary.

Firms should not code cash trades as Comparison-Only special trades; that is, do not enter **Comparison Only** in the Special/Conditional Trade field on RTTM Web's trade input screen or **CPRO** on the settlement Indicator SETR on the MT 515 message. Allow RTTM to designate these trades as Comparison Only.

CUSTOMER TRADES

How can I submit municipal customer trades to MSRB's RTRS (Real Time Reporting System)?

Municipal customer trades can be sent to RTTM through MT 515 messages. The Destination Code on the message should be '02' to instruct RTTM to report the trades to MSRB.

Customer trades can also be entered through the MSRB's RTRS web site. Contact MSRB to obtain access.

RTTM CMU MESSAGE TESTING

How can I test my MT 515 trade messages and MT 509 and MT 518 output messages with FICC before going live?

Contact the CMU RTTM Test Group. Send an email to ficcsupport@dtcc.com

ADDITIONAL USEFUL WEBSITES

Where can I find information about MSRB's RTRS system?

Visit the MSRB's web site available at www.msrb.org.

You can also call (202) 838-1330 and ask to speak with a transaction reporting specialist or email msrbsupport@msrb.org.

Where can I find information about Municipal Bond trades with a late notification of settlement date or issue Cancellation?

Visit the **New Issue: Cancellations, Late Notification of Settlement, or Other late Security Masterfile Updates** section available at: <http://www.dtcc.com/clearing-services/ficc-cmu/ficc-cmu-user-documentation.aspx>

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