

Specifications for Real-Time Reporting of Municipal Securities Transactions

Version 4.1, November 2022



Revision History

Version	Date	Description of Changes
1.0	June 2003	Initial publication
1.1	Sept 2003	Changes regarding: directing messages; notification of purge; "IDRO" literal; error messages; e-mail option; sender field; detailed changes/corrections
1.2	January 2004	<p>Addition of extended reporting deadlines for certain syndicate trades, trades in CUSIPs not traded in the previous year, and trades in variable and auction rate products and commercial paper (Section 1.2.2). Addition of new Special Price Reason codes to identify trades reported under the extended deadlines (Section 4.3.2).</p> <p>Deletion of text in section 1.6 regarding direction of reports of customer and IDRO trades to RTTM.</p> <p>Addition of Regulatory Status to MT509 specification (Section 2.9 and Appendix B.3)</p> <p>Deletion of requirement to identify ATS used in a trade.</p> <p>Minor additional changes to MT509 Field Specifications; addition of MT509 Field Analysis (Section 4.4.1).</p> <p>Revision of RTRS error codes (Appendix B.1)</p> <p>Corrections of typographic errors.</p>
1.2.1	November 2005	<p>Revision of RTRS error codes (Section 2.9 and Appendix B.1): Addition of U33D and Q55D; change of code from U191 to Q191 (no change in message); change of message for Q06A and Q55F.</p> <p>Addition of Special Condition Indicator to denote "Away from market price (other reason)" (M900, M910, M920, M930). Changed description of M200, M210, M220, and M230 to indicate they should be used only for transactions at prices away from the market price. Addition of statement that "Priced away from market" indicators M2nn and M9nn should not be used for extended settlement or other special conditions that do not impact the price (section 4.3.2 and Appendix B.2). Changed specification of field</p>

Version	Date	Description of Changes
		<p>:70E::TPRO//GSCC/SPXR by deletion of “prevailing” from “prevailing market price” (Section 4.2.1).</p> <p>Renaming of Special Price Reason Code as Special Condition Indicator; change of “Special price code” to “special condition indicator” in error message Q55F.</p> <p>Revision of Accrued Interest discussion in Section 4.3.2 (page 67) to agree with specification of AI in Section 4.2.1 (page 58).</p>
2.0	December 2006	<p>Implementation of changes announced before publication of Version 2.0</p> <ul style="list-style-type: none"> - Changes associated with MSRB Notice 2006-30 (Oct. 31, 2006), regarding the List Offering Price/Takedown indicator (Sections 1.2.2 and 4.3.2 and Appendix B). - Changes associated with MSRB Notice 2006-12 (April 24, 2006), regarding the expiration date for the 3-hour deadline for reporting certain transactions (Section 1.2.2). - Expansion of the Accrued Interest field to accommodate values up to \$9,999,999.99 (GSCC Important Notice A6329/P&S5899, MSRB Notice 2006-34; Sections 2.10 and 4.2.1 [Field “ACRU”]). - Eligibility of inter-dealer transactions with par amounts less than 1,000 for reporting to RTRS via RTTM (GSCC Important Notice A6329/P&S5899, MSRB Notice 2006-34; Section 4.3.2). <p>Textual clarifications that do not affect dealer input to RTRS (See Notice 2006-35)</p> <ul style="list-style-type: none"> - Deletion of parts of the Preface that explained MSRB’s plans at the time of Version 1 publication. Throughout Version 2.0, the present tense replaces the future tense (e.g., “RTRS will require...” changes to “RTRS requires...”). “Must” replaces “should” in various places (e.g., see note below regarding Trade Time). - Clarification that RTRS does not allow a late submission to be made timely by the addition of Special Condition Indicator M010 (Section 2.9).

Version	Date	Description of Changes
		<ul style="list-style-type: none"> - Substitution of “must” for “should” in specification of Trade Date, to read “Time of trade must be included to the second.” (Section 4.2.1, field “TRAD”) - Clarification of Section 1.1 regarding options for input. - Clarification of relationship of dollar price, yield and commission in customer agency transactions (Section 4.3.3). - Clarification that unused Special Condition Indicators M120, M220 and M920 are invalid (Appendix B). - Clarification of requirement for dealers to correct errors in transaction reporting promptly in response to RTRS error codes (Section 2.9).
2.1	January 2, 2008	<p>Extension of the expiration date of the three-hour deadline for reporting certain when-issued trades from December 31, 2007 to June 30, 2008 (Sections 1.2.2 and 4.3.2).</p> <p>Addition of end-of-day deadline for trade reports containing the M2c0 or M9c0 special condition indicator, i.e., “away from market” trades (Sections 1.2.2 and 4.3.2).</p> <p>Reformatting and clarified wording of explanation of all text regarding special condition indicator (SPXR) in Section 4.3.2.</p> <p>Addition of exemption from 15-minute reporting for inter-dealer trades that are “ineligible on trade date” and addition of special condition indicator Mc40. (Sections 1.2.2 and 4.3.2 and Appendix B)</p> <p>Addition of requirement to report inter-dealer trades that are “resubmissions of an RTTM cancel” by the end of the RTRS Business Day following the day the trade was cancelled and addition of Special condition indicator Mc50 (Sections 1.2.2 and 4.3.2 and Appendix B).</p> <p>Clarification that Special Condition Indicator M9c0, “Away from market (other reason)” is required in certain specific trading scenarios (Section 4.3.2).</p> <p>Addition of error message, “Special condition indicator inconsistent with trade details,” to Section 2.9 and addition</p>

Version	Date	Description of Changes
		of this message as U55F, "UNSAT Special condition indicator inconsistent with trade details" to Appendix B.1
2.2	October 2009 Changes Effective November 16, 2009	<p>Addition of EBS to list of data elements needed for matching (Section 1.3.3.b).</p> <p>Changed restriction on reporting of trades within one year of trade date (interdealer trades) or 90 days of trade date (all other trades) to allow reporting of trades with trade date January 2, 2002 or later; changed restriction on modifying or canceling customer/IDRO trades from 90 days to 24 months from trade date (Section 1.3.3.c, 2.9, 4.2.1 [MDFC], 4.3.2).</p> <p>Dropped Trade Date from list of elements that cannot be changed (Section 1.3.3.c,2.9).</p> <p>Clarified that submitter may specify XREF, TID or Match TID as "reversal control number" (Section 4.2.1 [RCTL],4.2.2,4.3.2).</p> <p>Deleted reference to three-hour deadline for certain trades, which sunset on December 29, 2006 (Section 1.2.2).</p> <p>Clarified that seconds may be entered as zero in Trade Date in certain circumstances (Section 4.2.1 [TRAD]).</p> <p>Changed "NASD" to "FINRA" throughout the document.</p>
2.3	January 2012 Changes Effective April 30, 2012	<p>Version 2.3 reflects changes described in MSRB Notice 2012-3 and are anticipated to be made effective on April 30, 2012. Changes include:</p> <p>Revised table of Special Condition Indicators in Appendix B.2 to remove the M2c0 indicator (used to indicate trades that are away from market due to an extraordinary settlement date) and delete the previously retired Mc10 indicator (used to claim a three hour exception from the fifteen minute reporting deadline).</p> <p>Deleted requirement to report the "intermediate dealer" for trades involving a correspondent of a correspondent (COCO) (Section 1.3.2).</p> <p>Added error code Q66E in Appendix B.</p>

Version	Date	Description of Changes
2.4	June 2012 Changes Effective November 2012	Version 2.4 reflects changes described in MSRB Notice 2012-15 and are anticipated to be made effective in November 2012. A specific effective date will be announced in an MSRB notice no less than thirty days in advance. Added details on reporting new Regulatory Dollar Price on inter-dealer trade reports. See Section 2.9 Error Messages; 4.2.1 MT515 Message Specifications and MT515 Field Specifications; 4.2.2 Analysis of MT515 Fields by Trade Type; and Appendix B.1 RTRS Error Codes. Substantive changes are highlighted with red text.
2.5	August 2012 Changes Effective Nov. 5, 2012	Version 2.5 continues to reflect all changes described in MSRB Notice 2012-15 by highlighting substantive changes in red. In addition to those changes, see Section 2.9 Error Messages for the addition of error code Q35J. As described in MSRB Notice 2012-55, the requirement to report Regulatory Dollar Price has been postponed to a future date.
2.6	January 2013 Changes Effective February 25, 2013	Effective date set for requirement to report Regulatory Dollar Price on inter-dealer trade reports. See changes detailed above in Version 2.4 of the RTRS Specifications. Activated error code Q35J.
2.7	November 2013	In Appendix B.2, added reference to descriptions of Special Condition Indicators found in Section 4.3.2 and removed references to Special Condition Indicators that were retired.
2.8	August 2015	Updated the Resources and Support section to reflect the change in hours of operation for Email Support.
2.9	July 2016	Updated to reflect changes to data reporting requirements (see MSRB Notices 2015-07 and 2016-09) <ul style="list-style-type: none"> • Expanded the application of the existing list offering price and takedown indicator to include distribution participant dealers and takedown transactions that are not at a discount from the list offering price. • Eliminated the requirement for dealers to report yield on customer trade reports and, instead, enabled the

Version	Date	Description of Changes
		<p>MSRB to calculate and disseminate yield on customer trades.</p> <ul style="list-style-type: none"> • Established a new indicator for customer trades involving non-transaction-based compensation arrangements. • Established a new indicator for inter-dealer transactions executed with or using the services of an alternative trading system (ATS). <p>Revised paragraph “SPXR-Special Condition Indicator” in Section 4.3.2 and table of Special Condition Indicators in Appendix B.2</p>
3.0	July 2016	Removed data tags and format in Section 4.2
4.0	October 2019	Removed the term “effective maturity” on pages 16 and 80.
4.1	November 2022	Updated links as needed for the revised MSRB.org website.

Table of Contents

Introduction	10
Part 1: Real-time Trade Reporting	14
1.1 Message-Based and Web-Based Data	14
1.2 Business Rules for Regulatory Reporting.....	15
1.3 New Procedures	17
1.4 Relation of RTTM to RTRS	25
1.5 IDRO Trade Reporting Procedure	29
Part 2: Interactive Message Guidelines.....	31
2.1 Overview.....	31
2.2 ISO 15022 Message Structure	32
2.3 MT515 Message Overview	36
2.5 MT518 Messages	38
2.6 MT599 Message Overview	38
2.7 Customer Trade Flow	39
2.8 Inter-Dealer Trade Data Flow	41
2.9 Error Messages.....	43
2.10 Data Format Differences	47
Part 3: Communications Overview Interactive	48
Part 4: Message Specifications.....	49
4.1 Message Format Guidelines	50
4.2 MT515 Message	54
4.3 Explanation of Selected Fields	75
4.4 MT509 Message	84
Appendix A: Examples of Data Flows for Regulatory Reporting	91
Appendix B: Code Tables.....	111

Resources and Support

MSRB Website: www.msrb.org

EMMA Website: emma.msrb.org

For assistance, contact MSRB Support at 202-838-1330 or MSRBsupport@msrb.org.

Live Support: 7:30 a.m. - 6:30 p.m. ET

Email Support: 7:00 a.m. – 7:00 p.m. ET

Municipal Securities Rulemaking Board

1300 I Street NW, Suite 1000

Washington, DC 20005

Tel: 202-838-1500

Fax: 202-898-1500

Introduction

The Municipal Securities Rulemaking Board (MSRB) protects investors, issuers of municipal securities, entities whose credit stands behind municipal securities and public pension plans by promoting a fair and efficient municipal market. The MSRB fulfills this mission by regulating securities firms, banks and municipal advisors that engage in municipal securities and advisory activities. To further protect market participants, the MSRB promotes disclosure and market transparency through its Electronic Municipal Market Access (EMMA®) website, provides education and conducts extensive outreach. The MSRB has operated under Congressional mandate with oversight by the Securities and Exchange Commission since 1975.

Interactive Messaging for Real-time Reporting of Municipal Securities Transactions
This document provides an overview of interactive messaging that is used with the Municipal Securities Rulemaking Board's (MSRB) Real-time Transaction Reporting System (RTRS). Its main purpose is to provide the required detailed input and output specifications for messages to support regulatory reporting.

Rule G-14, on transaction reporting, requires brokers, dealers and municipal securities dealers (collectively "dealers") that effect transactions in municipal securities to submit transaction data to the MSRB within 15 minutes of the time of trade, with limited exceptions.¹ Transaction prices are electronically disseminated immediately after transactions are received by the MSRB and automated error checking is completed.²

The procedures for real-time transaction reporting have been coordinated with the real-time comparison system for municipal bonds (the "Real-Time Trade Matching" or "RTTM" system) that has been implemented by the National Securities Clearing Corporation (NSCC).³ The use of NSCC telecommunication facilities as data collection points or "portals" for transaction data and the use of a standard common format for trade reporting and automated comparison through NSCC provide a straight through process for dealers to comply with the 15-minute transaction reporting requirement.

MSRB Rule G-12(f) requires dealers to use an automated comparison facility provided by a registered securities clearing agency for inter-dealer transactions. Transactions must be submitted to the system within 15 minutes of the time of trade to take advantage of the real-time comparison capabilities of the new RTTM system and to serve the function of real-time regulatory transaction reporting. The same trade report made by a dealer functions both for transaction reporting under Rule G-14 and for comparison under Rule G-12(f). Retail and institutional customer transactions and certain inter-dealer agency transactions described herein also are to be reported through the NSCC portals using the same record format as used for inter-dealer trades.

¹ See "Reports of Sales or Purchases," MSRB Rule G-14

² Once a dealer has successfully submitted trade information to a portal designated for receipt of the data, the error checking and dissemination process takes no more than 90 seconds.

³ NSCC is a clearing agency registered under the Securities Exchange Act.

NSCC does not process customer transactions in the comparison system but forwards the data to the MSRB and thus allow dealers to avoid setting up separate telecommunications links and facilities specifically for trade reporting to the MSRB.⁴

Submission of Transaction Reports by Intermediaries

A dealer is able to use an intermediary, *i.e.*, its clearing broker or service bureau, to submit transaction reports to RTRS. Dealers using an intermediary should ensure that the clearing broker or service bureau is able to submit the trade report satisfying both comparison and transaction reporting requirements within 15 minutes of the time of trade. Both parties in this case have the responsibility to work together to ensure that such trade submissions are timely and accurate. Dealers and their intermediaries also should agree regarding how customer trade reporting will be handled for the dealers. It is possible for either the dealer to submit directly to the MSRB or for the intermediary to submit on its behalf.

Message-Based versus Web Submission of Trade Data

Three options are available for initial input or for modification: the submission of electronic messages in a standard format, submission of data using the RTTM Web Interface, and submission of data using the RTRS Web Interface. In the message-based method of trade reporting, the dealer sends electronic messages containing trade data to the NSCC "Access Network" and receives interactive feedback, also as messages. NSCC acts as a portal, relaying the messages to and from the MSRB's RTRS. In using the RTTM Web Interface, the dealer accesses the RTTM Web site through an Internet browser to enter trade data and send it to the NSCC network and ultimately to RTRS. In using the RTRS Web Interface, the dealer accesses the RTRS Web site through an Internet browser and sends it directly to RTRS. Dealers may use any method, although RTRS Web cannot be used for submitting or amending inter-dealer transaction data that is used in the comparison process.

In essence, the message-based method is designed to allow a submitter to interface with RTRS and RTTM using its existing automated transaction processing systems. This allows dealers to avoid manual and duplicative data entry and to ensure that transaction reports are consistent with their internal trade records. The web-based trade submission methods require no system development work beyond an Internet connection and the need to obtain access to the system from NSCC and MSRB. However, web input is manual and it is not possible to interface the web-based method with the dealer's processing system. Therefore, exclusive use of the web-based method for submitting transactions generally is appropriate only for relatively low-volume submitters.

For high-volume submitters of transaction data, such as large dealers, clearing brokers and service bureaus, the only efficient and practical means for trade submission is likely to be message-based. The decision by MSRB and NSCC to use standard, non-

⁴ By agreement with the MSRB, NSCC does not charge dealers for serving as the portal for customer transaction data, but MSRB reimburses NSCC for any system costs that are attributable exclusively to this function.

proprietary, message formats and to implement systems in a coordinated manner is intended to reduce the development work necessary for submitters.

Audience

This document was written for systems and development personnel, including managers, analysts and programmers. It is intended for dealers that effect transactions in municipal securities and for other parties that submit transaction data for reporting purposes. Dealers are categorized as participants of NSCC (“participants”), dealers that are not NSCC participants (“non-participants”), and vendors that support dealers.⁵ The document presumes readers are familiar with technical concepts and terms, and have a basic understanding of NSCC fixed income products and services. In order to serve as a stand-alone document for non-participants and vendors, this Specification describes important features of the RTTM system as well as RTRS features. However, for a full and official RTTM Specification, see FICC’s *Interactive Messaging: NSCC Participant Specifications for Matching Input and Output*.⁶ The FICC specifications govern data formats for regulatory use, as well as for automated comparison. The reader of this document should be familiar with the FICC Specification.

Related Materials

SWIFT

The specifications for interactive messages supporting trade matching are based on ISO15022 SWIFT messages. A high-level overview of how SWIFT messages are structured is included in Section 2.2 of Interactive Message Guidelines. This section of the document provides readers with a general idea of how SWIFT messages are structured; it is not intended to replace SWIFT documentation in any way.



Readers are therefore strongly urged to refer to SWIFT user documentation to obtain a complete and comprehensive understanding of these message standards.

Resources include: the "SWIFT User Handbook", "Standards Release Guide 2002 (September 2002)", and "Category 5 Securities Markets Message Usage Guidelines (September 2000)". SWIFT information (including message formats) can also be found on the Internet at www.iso15022.org.

⁵ In this document, in certain contexts NSCC participants are referred to as “clearing brokers” and non-participants are referred to as “correspondents.” “Service bureaus” are vendors that provide back-office support for dealers, have telecommunications connections with FICC, and are authorized by dealers to submit trade messages to the MSRB via the FICC Access Network.

⁶ The FICC Specification can be found on the Internet at <http://www.dtcc.com/>. This RTRS Specification includes some, but not all, sections of the FICC Specification.

RTTM

In addition to the FICC Specification cited above, readers should refer to the documents on "Real-Time Trade Matching for NSCC-Eligible Fixed Income Securities: Business Overview (August 2001)", "Real-Time Trade Matching for NSCC-Eligible Fixed Income Securities: Business Requirements (July 2002)," "NSCC Real-Time Matching for Corporates, Municipals and UITs" (New Service Bulletin, May 30, 2003), "Implementation Timeline for RTTM for Corporate and Municipal Bonds and UITs" (New Service Bulletin, November 11, 2003) and related documents (e.g., New Service Descriptions or NSCC Important Notices).

Other Resources

Additional contact information for questions about operations or transaction data is given at <https://msrb.org/Trade-Data>.

A real-time display of the status of RTRS and other MSRB systems as well as the MSRB system holiday schedule is provided at: <https://msrb.org/System-Status>

Part 1: Real-time Trade Reporting

The MSRB's Real-time Transaction Reporting System (RTRS) includes both trades between dealers ("inter-dealer" or "street" trades) and trades between dealers and customers ("customer trades"). Sections 1.1 and 1.2 include information on business rules and procedures for reporting both types of trades. These sections are intended for all dealers.

Sections 1.3 through 1.5 focus on the submission of electronic trade messages via the NSCC's Access Network and reporting inter-dealer trades through NSCC's real-time comparison system, RTTM.⁷ These sections are intended primarily for NSCC participants. They may be of interest also to non-participants wishing to understand the flow of data in regulatory reporting of inter-dealer and customer trades.

1.1 Message-Based and Web-Based Data

Three options are available for initial input or for modification:

1. submission of electronic messages in a standard format,
2. submission of data using the RTTM Web Interface, and
3. submission of data using the RTRS Web Interface.

In the message-based method of trade reporting, the dealer sends electronic messages containing trade data to the NSCC "Access Network" and receives interactive feedback, also as messages. NSCC acts as a portal, relaying the messages to and from the MSRB's RTRS. In using the RTTM Web Interface, the dealer accesses the RTTM Web site through an Internet browser to enter trade data and send it to the NSCC network and ultimately to RTRS. In using the RTRS Web Interface, the dealer accesses the RTRS Web site through an Internet browser and sends it directly to RTRS. Dealers may use any method, although RTRS Web cannot be used for submitting or amending inter-dealer transaction data that is used in the comparison process.

The Web Interfaces also display trade details and the status of trades in the RTTM and RTRS systems. In so doing, they provide feedback systems that are alternatives to interactive messaging. The RTRS Web Interface is viewable by participants and non-participants. A third output alternative, e-mail notification of regulatory errors found by RTRS, is also available to participants and non-participants.

This document specifies how messages are to be constructed and used. The Web-based methods are mentioned where necessary for the reader to understand the role of input alternatives to messaging, but the Web Interfaces are not specified here. Both FICC and the MSRB have published documentation that describes the Web Interface

⁷ This document uses the terms "comparison" and "matching" interchangeably. NSCC distinguishes the terms. See NSCC and GSCC's *Real-time Trade Matching (RTTM) for NSCC-Eligible Fixed Income Securities: Business Requirements* (July 2002), fn 7 at page 7.

more fully. MSRB has also published procedures for dealer testing and guidelines for using RTRS.

1.2 Business Rules for Regulatory Reporting

This section specifies business rules for regulatory reporting under the MSRB's Rule G-14, covering: issues for which trades must be reported; deadlines for reporting; requirements for reporting the dealer's trading capacity as principal or agent; and the reporting of trades done as agent for a customer by a correspondent dealer from its clearing broker's inventory.

1.2.1 Securities that Must be Reported

In the real-time environment, all customer trades in municipal securities issues that have CUSIP numbers assigned by the CUSIP Service Bureau of Standard & Poor's must be reported, except municipal fund securities. Dealers should not report (a) customer transactions in issues ineligible for CUSIP number assignment and (b) municipal fund securities.

For inter-dealer trades, transactions must be reported in all municipal securities issues eligible for comparison in RTTM. In addition, Rule G-14 requires that the role of a clearing broker in RTTM-eligible agency transactions effected by an introducing broker against the principal positions of the clearing broker shall be reported (see below). If an issue is not RTTM-eligible (because of the lack of a CUSIP number for the security or other reasons), inter-dealer trades in the issue are not subject to the reporting requirement.⁸

1.2.2 Deadlines for Reporting

Trades in municipal securities are required to be reported to RTRS within 15 minutes of the time of trade, with the following limited exceptions:

- Dealers shall report "List Offering Price/Takedown Transactions" by the end of the day on which the transactions are executed. "List Offering Price/Takedown Transaction" means a primary market sale transaction executed on the first day of trading of a new issue: (a) by a sole underwriter, syndicate manager, syndicate member, selling group member or distribution participant to a customer at the published list offering price for the security ("List Offering Price Transaction"); or (b) by a sole underwriter or syndicate manager to a syndicate, selling group member or distribution participant ("RTRS Takedown Transaction").

⁸ It is the MSRB's understanding that all issues with CUSIP numbers assigned by Standard & Poor's are RTTM-eligible, except for when-issued short-term notes that pay interest at maturity and do not have a 30/360 day count method. Dealers should refer to NSCC for formal statements of RTTM eligibility.

 If a transaction is executed at a price that is not publicly disseminated (e.g., if the security is a “not reoffered” maturity within a serial issue), the transaction is not a “List Offering Price/Takedown Transaction.”

 This indicator is mandatory for all List Offering Price/Takedown Transactions, even if they are reported within 15 minutes of the trade time. Dealers must report trades in short-term instruments under nine months including variable rate instruments, auction rate products and commercial paper, by the end of the day in which the trades are effected.

- Dealers must report “away from market” trades, as described in Section 4.3.2, by the end of the day in which the trades are effected.
- Dealers must report trades that are “inter-dealer ineligible on trade date,” as described in Section 4.3.2, by the appropriate deadline: “VRDO ineligible on trade date” must be reported by the end of the day on which the interest rate reset occurs, and “invalid RTTM trade date” no later than fifteen minutes after the start of the next RTRS business day.
- Dealers must report inter-dealer trades that are “resubmissions of an RTTM cancel,” as described in Section 4.3.2, by the end of the RTRS Business Day following the day the trade was cancelled.

See below for details on how to indicate to the MSRB that a trade is eligible for an exception to the 15-minute reporting requirement (see Section 4.3.2, paragraph “SPXR – Special Condition Indicator” and Appendix B). Trade reports must include an appropriate Special Condition Indicator to receive an exception to the 15-minute reporting requirement. See section 4.3.2 for details.

1.2.3 Trading Capacity

Principal and Agency Trades. Rule G-14 requires a dealer reporting a transaction to report whether its capacity was as principal or as agent for the customer. Dealers must report trades to RTRS as follows:

- Any trade against the dealer’s principal position shall be reported as a “principal” transaction.
- Any trade that is not against the dealer’s principal position, which is effected as agent for a customer, shall be reported as an “agency” transaction.

Inter-Dealer Regulatory-Only (IDRO) transaction. In RTRS, when an introducing broker effects a trade for a customer against the principal position of its clearing broker, there is a requirement to report the role of the clearing broker, in addition to the requirement for the introducing broker to report the customer trade. The clearing broker is required to report that securities were sold from (or purchased into) its principal account by the introducing broker. This “transaction” between the clearing and introducing brokers is not required to be submitted for comparison because it does not

result in the movement of a principal position between dealers, and therefore does not constitute an “inter-dealer” transaction. Instead, it is termed an Inter-Dealer Regulatory-Only (IDRO) transaction.⁹

1.3 New Procedures

The following procedures were instituted when real-time transaction reporting began operation.

1.3.1 Reporting Inter-Dealer Capacity

The chart on the following two pages shows various types of transactions and describes the procedures to report the capacity of each dealer. The key transactions are:

Inter-dealer trade between two principals (example I). Dealer A and Dealer B are both clearing brokers trading as principals. Dealer A sells securities to Dealer B. A and B both report an inter-dealer trade as principal. In addition, Dealer B reports a principal sale to a customer.

Inter-dealer trade as agent for customer (example II). Dealer B, acting as agent for a customer, buys securities from Dealer A. Dealer A sells from its principal account but B’s trade does not affect B’s principal position. If the security is RTTM-eligible, Dealer A and Dealer B each must submit the inter-dealer trade for comparison and regulatory reporting. Dealer A reports the inter-dealer trade was done as principal. Dealer B reports the inter-dealer trade was done as agent. In addition, Dealer B reports an agency sale to a customer.

Trade from clearing broker’s position by introducing broker – IDRO (example III). Dealer E is a correspondent of Dealer B and has the privilege to sell securities from, or purchase securities into, Dealer B’s inventory. In the example, Dealer E sells RTTM-eligible securities from B’s inventory to a customer as agent. Dealer B must submit an IDRO transaction to RTRS, reporting that B sold as principal to E and that E purchased as agent. This transaction is submitted to RTRS through the FICC Access Network, but is not reported to RTTM for comparison. In addition, Dealer B reports an agency sale to the customer.¹⁰

⁹ This change to introduce IDRO reports was made at the request of FINRA (formerly NASD) to provide a more complete audit trail for surveillance purposes. It also provides consistency with the manner in which similar transactions are handled in the TRACE transaction reporting system for corporate bonds.

¹⁰ This report is similar to a TRACE “automatic give-up” (AGU) report.

Reporting Dealer Capacities and Identities

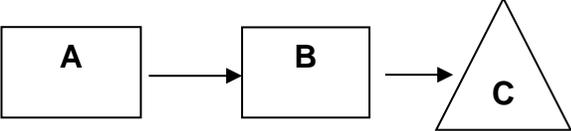
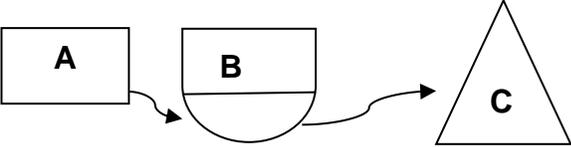
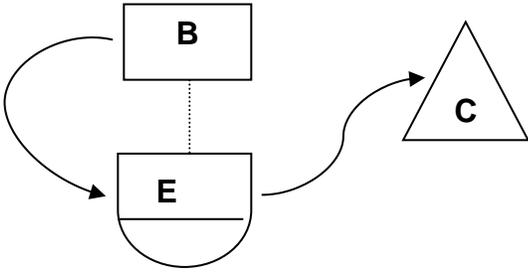
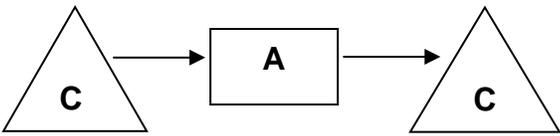
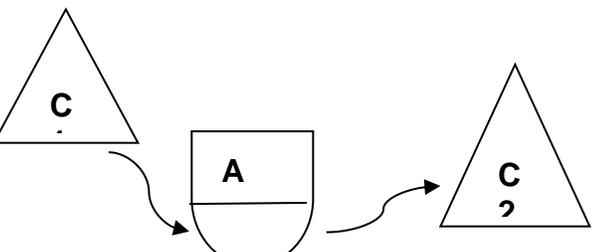
Diagram	Description	What Dealers Report
	<p>Dealer A sells to Dealer B; Dealer B sells as principal to customer. May or may not be "riskless principal" transaction.</p>	<p>Dealer A and Dealer B each must ensure an inter-dealer trade report is sent and, if eligible, a comparison is made. Dealer B also causes a customer report to be sent, showing that it effected a sale. Dealer B reports that it acted as principal in both reports. Dealer A reports it acted as principal.</p>
	<p>Dealer B acts as Customer C's agent to purchase security from Dealer A. Dealer A to "deliver" to Dealer B.</p>	<p>Dealer A and Dealer B each must ensure an inter-dealer trade report is sent and, if eligible, a comparison is made. Dealer B also causes a customer report to be sent, showing that it effected a sale. Dealer B reports that it acted as agent in both reports. Dealer A acted as principal.</p>
	<p>Dealer E acts as Customer C's agent to purchase security from Dealer B. Dealer E is a correspondent of Dealer B, such that Dealer B handles "delivery" to Customer C. This is termed an "inter-dealer regulatory-only (IDRO) transaction."</p>	<p>Dealer B must ensure an inter-dealer trade regulatory-only report is sent. No comparison is necessary. Dealer E also causes a customer report to be sent, showing that it effected a sale. Dealer E's capacity in both reports is as agent. Dealer B reports it acted as principal.</p>
	<p>Dealer A buys from Customer C1 as principal; Dealer A sells to Customer C2 as principal. May or may not be "riskless principal" transaction.</p>	<p>Dealer A causes a customer report to be sent for the buy from C1, and a separate customer report for the sell to C2. In both customer reports Dealer A reports that it acted as principal.</p>
	<p>Dealer A buys as agent from Customer C1 and sells as agent to Customer C2. (Termed an "agency cross" trade.)</p>	<p>Dealer A causes a customer report to be sent for the buy from C1, and a separate customer report for the sell to C2. In both customer reports, Dealer A reports that it acted as agent.</p>

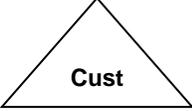
Diagram	Description	What Dealers Report
<p style="text-align: center;">LEGEND:</p>	<div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Clearing</div> <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 0 auto;">Corresp</div>	<div style="text-align: center;">  <p>Cust</p> </div>

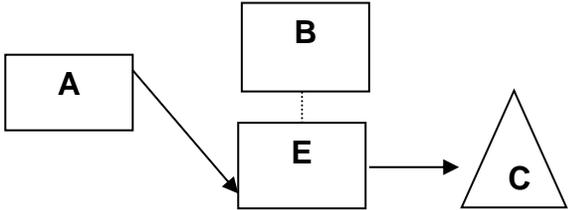
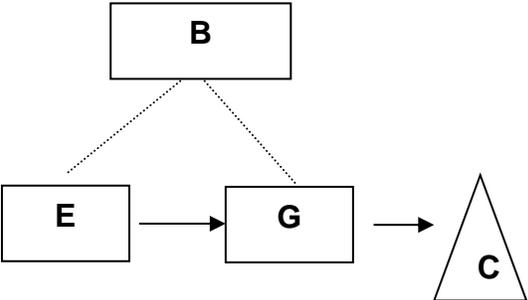
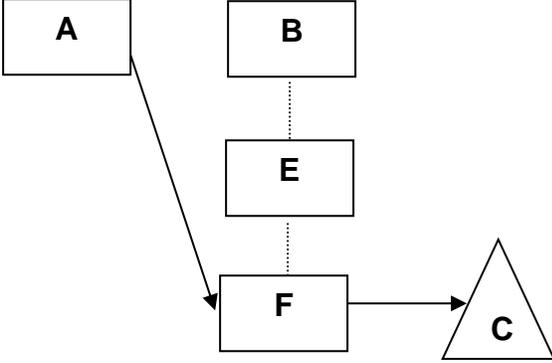
	Diagram	Description	What Dealers Report
<p>I a</p>		<p>VARIATION OF EXAMPLE I Dealer A sells to Dealer E; Dealer E sells as principal to customer. Dealer E is a correspondent of Dealer B.</p>	<p>Dealer A and Dealer E each must ensure an inter-dealer trade report is sent and, if eligible, a comparison is made. Dealer E also causes a customer report to be sent, showing that it effected a sale. Dealer E reports that it acted as principal in both reports. Dealer A reports it acted as principal.</p>
<p>I b</p>		<p>VARIATION OF EXAMPLE I Dealer E sells to Dealer G; Dealer G sells as principal to customer. Both Dealer E and Dealer G are correspondents of Dealer B.</p>	<p>Dealer E and Dealer G each must ensure an inter-dealer trade report is sent and, if eligible, a comparison is made. Dealer G also causes a customer report to be sent, showing that it effected a sale. Dealer G reports that it acted as principal in both reports. Dealer E reports it acted as principal.</p>
<p>I c</p>		<p>VARIATION OF EXAMPLE I Dealer A sells to Dealer F; Dealer F sells as principal to customer. Dealer E is correspondent of Dealer B. Dealer F is correspondent of Dealer E. (Dealer F is termed a correspondent's correspondent).</p>	<p>Dealer A and Dealer F each must ensure an inter-dealer trade report is sent and, if eligible, a comparison is made. Dealer A reports it acted as principal. Dealer F causes a report with the symbols of B and F to be sent to RTTM. Dealer F also causes a customer report to be sent, showing that it effected a sale. Dealer F reports that it acted as principal in both reports.</p>

	Diagram	Description	What Dealers Report
II a		<p>VARIATION OF EXAMPLE II Dealer F acts as C's agent to purchase security from Dealer A. Dealer E is a correspondent of Dealer B. (Dealer F is a correspondent's correspondent.) Dealer A to "deliver" to Dealer B.</p>	<p>Dealer A and Dealer F each must ensure an inter-dealer trade report is sent and, if eligible, a comparison is made. Dealer F causes a report with the symbols of B and F to be sent to RTTM. Dealer F also causes a customer report to be sent, showing that it effected a sale. Dealer F reports that it acted as agent in both reports. Dealer A reports it acted as principal.</p>
III a		<p>VARIATION OF EXAMPLE III Dealer F acts as Customer C's agent to purchase security from Dealer B. Dealer F is a correspondent of Dealer E. Dealer E is a correspondent of Dealer B. Dealer B handles "delivery" to Customer C. IDRO, COCO.</p>	<p>Dealer B and Dealer F each must ensure an inter-dealer trade report is sent. No comparison is necessary. Report symbols of Band F to RTRS. Dealer F also causes a customer report to be sent, showing that it effected a sale. Dealer F reports that it acted as agent in both reports. Dealer B reports it acted as principal.</p>
III b		<p>VARIATION OF EXAMPLE III Dealer F acts as Customer C's agent to purchase security from Dealer E. Dealer F is a correspondent of Dealer E. Dealer E is a correspondent of Dealer B. Inter-dealer regulatory-only (IDRO) and COCO.</p>	<p>Dealer E and Dealer F each must ensure an inter-dealer trade report is sent. No comparison is necessary. Report symbols of B, E and F to RTRS. Dealer F also causes a customer report to be sent, showing that it effected a sale. Dealer F reports that it acted as agent in both reports. Dealer E reports it acted as principal.</p>
<p style="text-align: center;">LEGEND:</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">Clearing</div> <div style="border: 1px solid black; padding: 2px;">Corresp</div> <div style="text-align: center;"> </div> </div>			

1.3.2 Reporting the Correspondent of a Correspondent

Every transaction that is reported to RTRS must include the Financial Regulatory Authority (FINRA) assigned symbol that identifies the dealer that effected the trade. Usually, this is the NSCC participant (if the participant is reporting on its own behalf) or its direct correspondent. In some cases, however, the dealer that effected the trade is a correspondent of a direct correspondent. An example: participant 0123 has direct correspondent dealer “E”. “E”, in turn, has a correspondent dealer “F”. In RTRS, the indirect correspondent, “F”, is known as a “correspondent of a correspondent.” The correspondent of the correspondent is the dealer that effected the trade. Accordingly, this dealer must be reported as the Correspondent to the transaction. In the example given, the transaction report would include symbol 0123 as the Participant and F as Correspondent. The chart on the preceding pages shows how to report trades involving a correspondent of a correspondent in examples Ic, IIa, IIIa and IIIb.

1.3.3 Input and Change Procedures

1.3.3. a Initial Input

As mentioned in the introduction, an advantage of the real-time environment for inter-dealer trades is that a single trade message satisfies both regulatory trade reporting and comparison purposes.¹¹ This helps to ensure consistency of records among dealers that effect inter-dealer trades, their clearing brokers, the RTTM system, and RTRS. It also increases the likelihood that trade input will be accurate.

Trades are submitted to the RTTM comparison system by clearing brokers, either on their own behalf or on behalf of their correspondent dealers. Accordingly, clearing brokers report inter-dealer trades by their correspondents to the MSRB with the same message they use to submit the trade for comparison.

The format of the single message incorporates both trade comparison and regulatory reporting data elements. The regulatory reporting elements are those required by the MSRB for reporting purposes but not needed for comparison – for example, the time of trade execution. In the real-time environment, it is possible for correspondent dealers to view on the Web Interface all data about their trades submitted by their clearing broker for comparison to RTTM and reported for regulatory purposes to RTRS. As described immediately below, correspondent dealers are able, if necessary, to make corrections to the regulatory data without a need for the clearing broker to submit corrected regulatory data on their behalf.

In the real-time environment, either the dealer that effects the trade submits the report or another party, such as a service bureau or clearing broker, submits the report on behalf of the effecting dealer.

¹¹ See “Plans for MSRB’s Real-Time Transaction Reporting System,” Notice 2003-3 (February 3, 2003), on www.msrb.org.

1.3.3. b Modification and Cancellation

This section describes which of the parties with reporting responsibility may change trade data, and under what conditions changes may be made.

MSRB's Rule G-14 puts primary responsibility upon the dealer that effects trades to report them accurately and in a timely manner, with shared responsibility placed upon the dealer's agent (clearing broker or service bureau) that may assist in reporting. The MSRB recognizes that a dealer on occasion, despite its best efforts to report accurately and timely, may need to correct elements of a trade that are in error, or to cancel a trade completely, e.g. in case a trade is mistakenly reported twice. Such corrections and cancellations must be done as soon as possible.

The following principles govern who can change trade data that is reported to RTRS. The next section gives principles governing when data can be changed. Because of the role of FICC in clearance and settlement, principles regarding inter-dealer trades are more restrictive than principles for customer trades.

Inter-dealer trades: Only NSCC participants may change data that is used to match two sides of the trade or used to calculate the settlement amount of the trade. (This data is known as "match data" and is defined below.) The dealer that effects an inter-dealer trade, whether participant or non-participant, may change data used solely for regulatory purposes, except that non-participants are restricted to the Web Interface to change inter-dealer trade data – that is, non-participants may not use messaging for any action on inter-dealer trades.

RTRS will segregate the data submitted by dealers on each side of the trade, to enable assessment of the compliance of each dealer with the reporting rules of G-14. A change made to regulatory data (e.g., time of trade) by a dealer will not affect the corresponding data submitted by the contra parties.

Reversal of compared inter-dealer trades: The RTTM system allows participants to reverse, or exactly offset, an inter-dealer trade after the trade has been compared. Non-participants may not reverse trades. (Reversal does not apply to customer or IDRO trades.)

Customer trades: 1. The dealer that effected the trade, or its agent for reporting, may input or change data about the trade. 2. A participant may use either messaging (the MQ Series product or "MQ," described in section 3 below), the RTTM Web, or the RTRS Web Interface for these purposes. 3. A non-participant, through its agent with a valid participant number, may use either MQ, the RTTM Web, or the RTRS Web Interface, or the non-participant, with MSRB authorization, may use the RTRS Web Interface directly, to make these changes.

Inter-dealer regulatory-only (IDRO) reports: 1. The clearing broker must input the report on behalf of itself and its correspondent. 2. The clearing broker may modify the data or cancel the entire trade report.

Match data: For these purposes, the “match data” about inter-dealer trades, which may be changed only by participants and only before the trade is matched, consists of:

- Accrued Interest
- Buy/Sell Indicator
- Concession
- Contraparty (buyer or seller)
- Contraparty Correspondent
- DK Reason
- CUSIP
- Issue Type (Syndicate/Target Syndicate)
- Locked-in/Demand/Bilateral Trade Indicator
- Market of Execution
- Participant (buyer or seller)
- Participant Correspondent
- Price (Yield or Dollar Price)
- Quantity
- Record Type (Instruct, Modify, Cancel, DK)
- Reversal Indicator (Reversals only)
- Settlement Amount
- Settlement Date
- Settlement Date Adjustment (Extended Settlement Date)
- Settlement Type Indicator (Special Trade Indicator)
- Trade Date¹² [the “Trade Time” portion of Trade Date is not match data]
- Trade Type/Target Indicator (Locked-in [QSR] and target QSR trades)¹³

Regulatory-only data: Inter-dealer trade data used solely for regulatory purposes, which may be changed by participants or via the Web Interface by non-participants, consists of:

- Destination (MSRB)
- Executing Broker Commission
- External Reference (Master Reference Number or XREF)
- Originator of message
- Regulatory Dollar Price
- Reversal Control Number

¹² Although Trade Date is listed as a match item in the *RTTM Business Requirements*, RTTM may adjust the Trade Date of a side to make a match. Dealers should not enter changes to Trade Date into the RTRS system.

¹³ Additional match data values apply to NYSE ABS trades. Listed here for completeness, they are: Issue type = Regular Way or New Issue; Trade type = ABS and target ABS.

- Special Condition Indicator (previously: Special Price Reason Code)
- Trade Time
- Trading Capacity - Contraparty
- Trading Capacity – Participant
- Type of Price - Weighted Price
- All fields on Customer and IDRO trades are used for regulatory purposes only (i.e., they have no “match data”).

1.3.3.c Conditions for modification and cancellation

The following rules govern when trade data may be modified and canceled.

Inter-dealer trades: NSCC rules govern the timing of changes to inter-dealer trades.¹⁴ Before a trade is matched, any data element except the CUSIP number or market of execution may be changed. Syndicate and syndicate target trades are exceptions: no match elements on these submissions may be changed after submission date. The participant may cancel its trade report until the trade is matched. After RTTM matches the trade, or if it is unmatched after submission date, no match data may be changed.

Regulatory data in an inter-dealer trade may be changed either before or after the trade is matched. It may be changed up to 24 months after the trade date.

An interdealer trade that was inadvertently not reported within its deadline may be reported by both parties within two years of trade date. RTRS will mark such submissions late.

As mentioned above, participants should reverse a matched trade if it is necessary to change match data after a match is achieved.

Customer trades: Any incorrectly reported data, (except clearing ID, CUSIP and executing broker symbol [EBS]) may be changed up to 24 months after the trade date. A customer trade that was inadvertently not reported may be reported within two years of trade date. RTRS will mark such submissions as late. Clearing ID, CUSIP and EBS may not be changed at any time.

IDRO reports: The rules for changing and reporting IDRO trades are the same as for customer trades.

¹⁴ See Section 1.4 or refer to RTTM documentation for the relevant rules.

1.4 Relation of RTTM to RTRS

1.4.1 RTTM Service Features

RTRS handles both inter-dealer and customer trades as consistently as possible, but because of the concurrent need to compare and match the buy-side and sell-side data of inter-dealer trades, understanding RTRS requires an understanding of the NSCC's real-time comparison system, RTTM. RTTM will provide a means for dealers to satisfy two goals at once – that of real-time transaction reporting and real-time comparison of inter-dealer transactions. Section 1.4 gives an overview of RTTM's features and the relationship between RTRS and RTTM. NSCC has described the following RTTM services:

- NSCC members have the ability to submit trade input to RTTM intra-day, as trades are executed, using the SWIFT 15022 MT515 message format. The MT515 inbound message specification will support all information required for RTTM to facilitate settlement, as well as that information required for the regulatory bodies.
- Submitters can immediately receive RTTM trade status information (i.e., notification of whether the trade has been accepted or rejected) via the SWIFT 15022 MT509 message format. This format is also used to provide up-to-the-minute trade status information to members as transactions are processed by RTTM (for example, a message is sent when a trade matches, is canceled or is modified).
- Trade counterparties can also be notified immediately via a SWIFT 15022 MT518 message when a trade has been submitted against them. The SWIFT 15022 MT518 message contains full trade details, like the MT515. It is also used to communicate to the participant those changes that RTTM may have made to trade records that were previously submitted.
- Regulatory reporting data received real-time will be immediately forwarded to the appropriate regulatory interface for price transparency and surveillance purposes.
- NSCC participants and non-participants have the ability to submit Regulator Only (Reporting-Only) messages. NSCC members are also apprised of RTTM system availability and major system events through MT599 Administrative Messages; members and non-members also are apprised of RTRS availability and major system events through MT599s.

Under RTTM, NSCC's matching process runs in real-time, enabling participants to match trades as close as possible to their execution and submission. With interactive messaging, participants have the ability to submit trade data to RTTM, review output, and identify and correct any errors, all within minutes of execution.

1.4.2 RTTM Role in Regulatory Reporting

RTTM serves as a single conduit for participants to submit their fixed income trades for both trade matching and regulatory reporting. Participants therefore submit a single trade message to RTTM for both matching and real-time reporting of their street-side municipal bond trades to the MSRB and their over-the-counter (OTC) corporate bond trades to the NASD to comply with applicable price transparency requirements.

While customer information is not accepted into the RTTM matching application, interactive messages of customer trade activity submitted to the RTTM Access Network by participants and service bureaus is forwarded to RTRS, as specified by the participant. Customer trade reports may also be submitted to RTRS via the RTTM Web Interface.

The MT515 layout supports input requirements for RTTM as well as for MSRB and NASD customer and inter-dealer transactions; specific fields have been allocated for regulatory reporting. The layouts included in this document support submission of trades for regulatory reporting by non-NSCC members as well as members. While RTTM validates all matching-related fields, it will not validate that regulatory fields are populated, nor that they are populated with the correct information. RTTM will, however, validate regulatory fields for correct format, to the extent that SWIFT 15022 messages can be created for the regulators based on participant supplied information, where applicable. Each regulatory body is responsible for ensuring required information is submitted accurately by its members.

1.4.3 Directing Submissions to Comparison and Reporting Systems

The MT515 interactive message layout enables NSCC participants to submit one record that facilitates matching and settlement as well as regulatory reporting. Participants are able, via the MT515, to indicate whether the record of a municipal securities trade should be sent to RTTM and/or the MSRB's RTRS.

The header of the MT515 enables a participant to designate in the Receiver field whether the record should go to RTTM and, where applicable, the MSRB (NSCCTRRS), or whether the record should go to the MSRB only (NSCCREGO).

In addition, the Transaction Processing narrative field (:70E::TPRO//) in the Confirmation Details block (CONFDET) contains a repeating field which is required to further tell the RTTM router where a record should be directed. Participants must indicate whether they want their trade records to go to:

1. RTTM only (/DEST01)
2. MSRB only (/DEST02)
3. RTTM and MSRB (/DEST01/DEST02)

These options should use the following Recipient in the message header in combination with Destinations in the :70E::TPRO// field:

Intended for	Destination (:70E::TPRO//)	Header-Receiver
RTTM only	/DEST01	NSCCTRRS
MSRB only	/DEST02	NSCCREGO
RTTM and MSRB	/DEST01 /DEST02	NSCCTRRS

It should be noted that where a Recipient in the message header does not agree with the Destinations reflected in the :70E::TPRO// field, RTTM will reject the message for “Inconsistent Recipient Information”. Where an unknown value is found in the receiver field, the message will be rejected for “Unknown Target Application”.

1.4.4 RTTM/RTRS Input-Output Relationships

Time relationships for input and output in real time are described here.

Inter-Dealer Trades

Input

On interactive messages, participants are required to indicate whether an MT515 record should be sent to RTTM and/or RTRS.

A destination of MSRB (/DEST02) in the Transaction Processing Narrative field (:70E::TPRO//) is required in order for a trade to be sent to RTRS at the MSRB for reporting purposes. Related system generated events will also be forwarded by RTTM to the MSRB (based on this indicator and the trade market of execution).

- All inter-dealer trade records sent for matching-only (not for reporting) should be marked with NSCCTRRS in the header and with /DEST01 (RTTM) in the :70E::TPRO// field.¹⁵
- All inter-dealer trade records submitted for both matching and reporting should be marked with NSCCTRRS in the header and with /DEST01/DEST02 (RTTM and MSRB) in the :70E::TPRO// field.
- All inter-dealer trade records submitted for reporting-only should be marked with NSCCREGO in the MT515 header and with /DEST02 (MSRB) in the :70E::TPRO// field. Inter-dealer records submitted for “reporting-only” are those that affect trades that are not stored in the RTTM database, that affect only the

¹⁵ Those records sent for matching-only are inter-dealer deliveries that are not the result of inter-dealer transactions. See MSRB Notice 2005-22, “Notice on Comparison of Inter-dealer Deliveries that Do Not Represent Inter-dealer Transactions,” April 1, 2005.

regulatory data listed above, and do not affect any match data. Customer trades and IDROs are also submitted for reporting-only.

It should be noted that inter-dealer trade modifies for reporting-only purposes should be submitted to NSCCTRRS (RTTM) until the trade is no longer on the RTTM system, after which time the trade modify should be directed to NSCCREGO. RTTM sends the participant an MT518 Settlement Disposition Message to inform it when the trade will no longer be stored on RTTM. Generally speaking, trades remain on RTTM as follows (see Appendix C of NSCC's May 30, 2003 New Service Bulletin, "NSCC Real-Time Matching for Corporates, Municipals and UITs" (on www.dtcc.com) for details):

- All matched trades, other than comparison-only, are available for regulatory modifies through end-of-day delivery date (anticipated actual settlement date).
- Comparison-only matched trades are available through end-of-day contractual settlement date.
- Unmatched inter-dealer trades that are not DK'd or "pending" remain on RTTM through the end-of-day submission day + 2.
- If a trade was not initially reported to RTTM or if it has been purged from RTTM (see below), RTTM rejects any Modification or Cancel message directed to RTTM. RTTM rejects such messages if they have either of the following values
 - :70E::TPRO//DEST01
 - :70E::TPRO//DEST01/DEST02
- If the trade is not in RTTM, a Modification or Cancel message intended for RTRS must be directed to RTRS (DEST 02) *only*. See Section 1.6 for more on the options for recording regulatory changes in one or both systems.

Output

RTRS outputs are available in two formats: MT509 messages and e-mail. Messages are directed to participants that have informed FICC and MSRB that they are capable of reading interactive message data. E-mail is available as an option to any user, including participants, non-participants and service bureaus, with a valid participant number or effecting broker symbol.

For as long as an inter-dealer trade is in the RTTM database, RTTM will respond to any input (Instruction, Modify, Cancel, etc.) with either an MT509 acknowledgement or a rejection message. If RTTM has already acknowledged an inter-dealer input and RTRS does not find any regulatory errors (including lateness) in it, RTRS will not send an additional MT509 (although it will send an e-mail if the user has requested e-mails). However, RTRS will send an *additional* MT509 in the following cases:

- A regulatory error is found in the input of the inter-dealer trade, or it was received late

- A Modify is received changing regulatory data after the dealer is advised via an MT509 of a regulatory error.

Reporting-only trade records sent to the MSRB (NSCCREGO) will receive no RTTM-generated ACK/NAK messages (unless the record is non-SWIFT/ISO 15022 compliant, in which case NSCCTRRS will be the sender of the NAK information).

RTRS will send an MT509 if a record of a customer trade or IDRO is received by the reporting deadline and has no regulatory-related errors. RTRS will also send an MT509 for a customer trade or IDRO which has a regulatory error, or which the dealer has modified.

All MSRB output is also made available via the RTRS Web Interface. For trades initially reported through RTTM (DEST 01) as well as those forwarded to RTRS to which changes have been made through RTTM, regulatory data elements and the regulatory status is also displayed on the RTTM Web.

To help participants know where to direct changes to trades that were originally sent to RTTM, RTTM sends deletion messages to participants when trades have been “purged” from the RTTM database. For matched inter-dealer trades, RTTM sends an MT518 settlement disposition record that includes the delivery date and RTTM will purge the trade record at end-of-day on the delivery date. For purge dates of unmatched inter-dealer trades, see Appendix C of NSCC’s May 30, 2003 New Service Bulletin, “NSCC Real-Time Matching for Corporates, Municipals and UITs”.

1.5 IDRO Trade Reporting Procedure

To report an inter-dealer regulatory only transaction, the following procedures must be used.

- The clearing broker (participant) submits the message as a unilateral (single record) inter-dealer transaction with Trade Transaction Type of “locked-in”.
- The Trade Type Indicator in the record pertains to the clearing broker’s role as either seller or buyer. If securities are sold from the clearing broker’s inventory (its principal account), a “Sell” record is submitted; otherwise, a “Buy” record.
- The clearing broker enters its participant identifier as SELL/GSCC/PART if securities are sold from its inventory, or as BUYR/GSCC/PART if bought into its inventory. On the other side, the clearing broker enters “IDRO” (*i.e.*, .../GSCC/PARTIDRO).
- The clearing broker assigns its own External Reference Number (X-REF) to the trade. When RTRS acknowledges the trade it will return a Regulator Control Number which can be used as an alternative to the X-REF if the trade later needs to be modified or canceled.

Definitions of Trade Transaction Type, Trade Type Indicator, X-REF and Regulator Control Number are in Section 4.

1.6 How Trade Messages Can Be Distinguished

Municipal securities trade messages have the following distinguishing characteristics.

Bilateral inter-dealer

Instruction and match item modification (may or may not include change to regulatory data also): Receiver is NSCC (TRRS), destination RTTM and RTRS, trade transaction type indicator is “cash”.

Modification to only regulatory data after trade is purged from RTTM: Receiver is MSRB (REGO), destination is RTRS, trade transaction type indicator is “cash”.

Demand (syndicate takedown)

Instruction and match item modification (may or may not include change to regulatory data also): Receiver is NSCC (TRRS), destination RTTM and RTRS, trade transaction type indicator is “demand”.

Modification to only regulatory data after trade is purged from RTTM: Receiver is MSRB (REGO), destination is RTRS, trade transaction type indicator is “demand”.

Note: A “demand (syndicate takedown)” message is indicated by codes “TRTR/GSCC/TRDC” and “TPRO//GSCC/ITYPSY” as specified in section 4.2.1. This is separate and distinct from the “List Offering Price/ Takedown Transaction” Special Condition Indicator (code “SPXR”). “List Offering Price/Takedown Transaction” is defined in section 1.2.2

Locked-in (QSR)

Instruction and match item modification (may or may not include change to regulatory data also): Receiver is NSCC (TRRS), destination is RTTM and RTRS, trade transaction type indicator is “locked-in,” trade type/target indicator is TSQS.

Modification to only regulatory data: Receiver is REGO, destination is RTRS, trade transaction type indicator is “locked-in,” trade type/target indicator is TSQS. (This Modify applies to an earlier Instruct that reported a QSR. Trade.)

Customer Trade

Instruction or modification: Receiver is MSRB (REGO), destination is RTRS, trade transaction type indicator is “cash”. One party is always “CUST.”

Inter-dealer Regulatory-only (IDRO)

Instruction: Receiver is MSRB (REGO), destination is RTRS, trade indicator is “locked-in,” trade type/target indicator is absent. The Participant field on the side whose inventory is changed has the clearing broker’s participant number; on the other side it has “IDRO.” Modification: Receiver is REGO, destination RTRS, locked-in, trade type/target indicator is absent.

Part 2: Interactive Message Guidelines

Section 2.1, "Overview," through Section 2.6, "MT599 Overview"¹⁶ provide some background information that may be useful for interpreting the detailed message specifications that follow. Sections 2.1 through 2.6 are primarily intended for FICC participants and service bureaus who prepare and submit messages.

The remainder of Section 2 is intended for both FICC participants and non-participants. It describes the flow of data through RTRS and RTTM and the error messages that RTRS produces. Dealers that effect inter-dealer or customer trades will be using the information described in this portion of the document.

2.1 Overview

FICC has adapted the ISO 15022 message formats for interactive matching input and output. These ISO formats were developed in coordination with international securities industry working groups (i.e., the ISO Technical Committee, TC68) in order to establish a viable and efficient industry standard. This standard defines messages composed of required and optional variable-length sequences of tags and data fields, maximizing the flexibility and practical application of the messages.

The important aspect of this format is the ability to include only the data necessary for a specific business transaction. Each trade message may require somewhat different fields. Coding for these formats should allow new functionality to be added without requiring extensive re-testing.

The flexible format of the ISO 15022, continuing evolution message standards, and the ongoing deployment of new FICC services, makes it likely that new fields will be added to the standard. Efforts should be made to implement a general, field-processing engine, rather than a hard-coded, fixed implementation of the entire message specification. Chapter 14 of the "SWIFT Standards Category 5 Securities Markets Message Usage Guidelines – September, 2000 Edition" document presents a programming guide that provides suggestions for programming these ISO 15022 message format.

Much of the information that appears in this section of the document has been derived from the "SWIFT Standards Category 5 Securities Market Message Usage Guidelines – September, 2000 Edition".

While FICC has elected to use SWIFT ISO 15022 standardized messages, it is not intending to utilize the SWIFT network. The current plan is to utilize our proprietary network for communication between FICC and its members. The messages are intended, however, to be compliant with SWIFT regulations so that the SWIFT network could be used, if ultimately deemed appropriate.

¹⁶ These sections are a revised form of the corresponding sections of the FICC Specification.

2.2 ISO 15022 Message Structure

ISO 15022 SWIFT message formats are constructed using a modular methodology based on the premise that information can be identified and programmed once, then reused wherever needed. Using this approach, data is configured into logical groups (i.e., generic fields and blocks) according to business purpose. These groups are then uniquely identified (using tags, qualifiers and start/end of block designators) so that they can be used whenever needed to fulfill particular business purposes across a number of messages without requiring extensive reprogramming.

If the basic message structure were diagrammed from the top down (going from the more general to the more specific), you would have a Message Header followed by one or more information blocks (potentially containing sub-blocks), composed of one or more fields. Each of these components is defined in the text below.

2.2.1 Message Header

The message header specifies the sending and receiving parties of the message and provides the message type. FICC has added a password to this header to provide an additional level of security for NSCC participants. The message header is the first component of every message. FICC requires that the fields in the header have a fixed format. The header is populated as a continuous string of data (complying with the requirement specifying the allowable characters for a given line in a message) and terminates as a regular data field (with a carriage return line feed “CRLF”).

2.2.2 Blocks and Sub-blocks

A block may be defined as a group of fields containing related business information that is framed by start-of-block and end-of-block designators. The use of a block is not restricted to any given message; it can be reused across a number of messages and combined with other blocks to fulfill a variety of business requirements. For example, the General Information block (found in the MT515, MT509 and MT518) contains general information regarding the trade, such as trade reference numbers. The Confirmation Details block (found in the MT515 and MT518) contains specific trade information such as trade date, settlement date, price, security and information regarding the confirming parties.

Each message contains one or more blocks. A typical message contains a General Information block, followed by a series of detail blocks. These blocks may be mandatory or optional within a particular message, and are structured as follows:

- A start-of-block designator (represented by the tag 16R), indicating the start of a group of related information;
- One or more sub-blocks and/or fields; and
- An end-of-block designator (represented by the tag 16S), indicating the end of a group of related information.

An information block may be further divided into sub-blocks containing groups of fields that further define the block. The structure of a sub-block is the same as that of a block, the difference being that it is “nested” or contained within the block. For example, the Confirmation Parties blocks are sub-blocks of the Confirmation Details block. Sub-blocks, under certain circumstances, can be repeated in a block (e.g., the Buyer and Seller Confirming Party sub-block).

2.2.3 Fields

There are two types of fields: **generic fields and discrete fields**. As the names imply, generic fields are multi-purpose fields used across messages and message types, whereas discrete fields in messages are limited to a single purpose. Generic fields further support the flexibility and modular message structure of the message formats. Each generic field is a basic group of business data that is common throughout all messages, such as date and amount.

At a minimum, each field is composed of an identifying **tag** and its associated **field data**. A tag may be thought of simply as a 2-digit number that represents the type of data contained in the field followed by an alpha character that provides format information associated with the field contents. For example, 98A is the generic tag used to indicate a date field in a particular format (YYYYMMDD).¹⁷ The format for a tag includes two delimiters – one to indicate the start of the tag, and a second to indicate the end of the tag. These delimiters are indicated using a colon. Continuing with the example above, the proper format for the generic tag used to indicate a date in the YYYYMMDD format would be “:98A:”.

Because there are a number of different types of dates that may be associated with any given trade, the generic field tag must be further described if it is to be useful. Qualifiers are used to provide this additional level of description. For example, the tag 98A followed by the qualifier SETT means that the corresponding field data is the settlement date for the trade. The tag 98A followed by the qualifier TRAD means the corresponding field data is the trade date for the trade. Qualifiers for generic tags are always preceded by an additional colon “:”.

The generic field for a settlement date of March 31, 2003 in the YYYYMMDD format, including the generic tag, the qualifier and the field data would be:
:98A::SETT//20030331

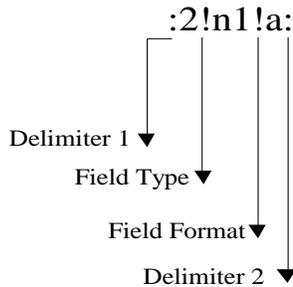
Although tags are numeric, they generally do not need to be placed in sequence, except if there is a sequence dependency as part of the format. Tags that are part of a block must remain within the “start” and “end” block tags.

¹⁷ This section is taken from the *NSCC Participant Specifications for Matching Input and Output, Version 1.0*, Section 2.

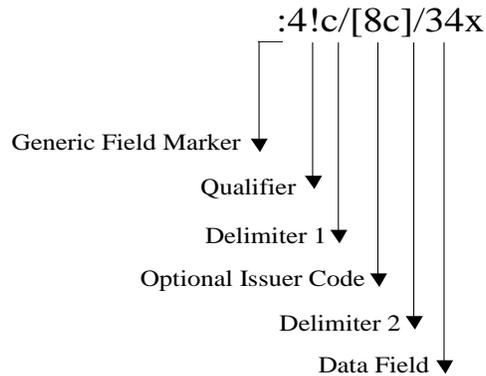
2.2.4 Tag and Field Format Illustrations and Chart

The illustration below shows the format for a generic field tag (e.g., :98A:) and its associated field data. The illustrations are followed by charts providing the definitions of the elements delineated in the illustrations:

Sample Field Tag:



Sample Generic Field Format:



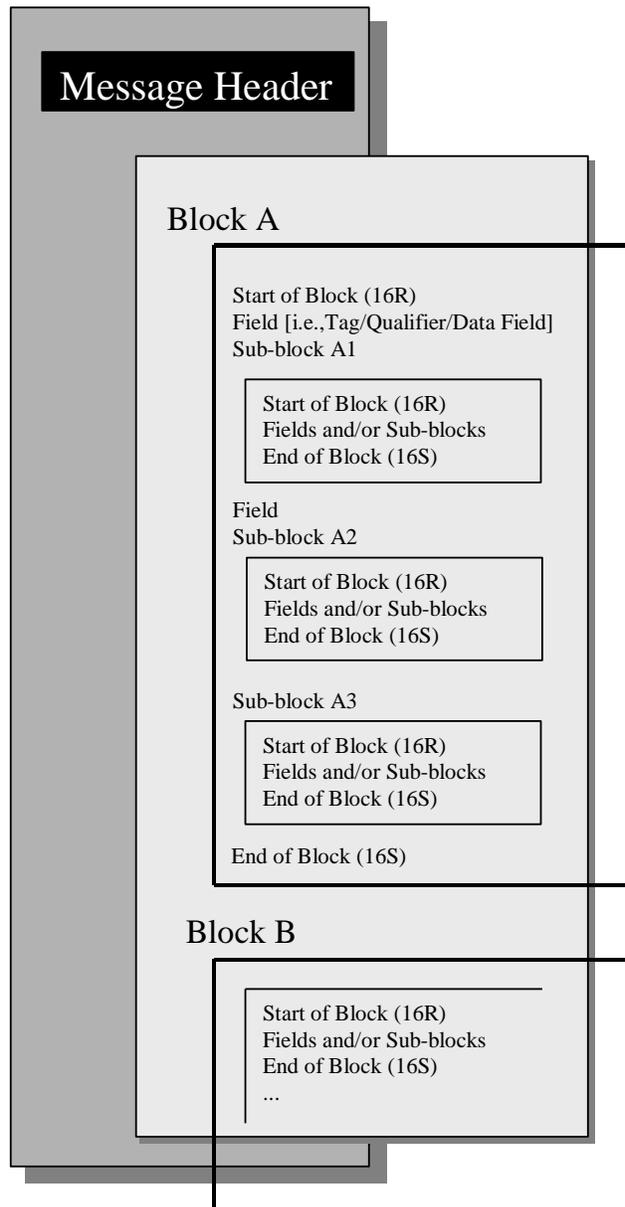
Field Tag Components	Format	Definition
Delimiter 1	:	Shows the start of the field tag.
Type of Field	2!n	2-digit number representing the data type. Note that “!” indicates a fixed field size.
Field Format	1!a	The format of the contents of the data field.
Delimiter 2	:	Shows the end of the field tag.
Example - Field Tag	:98A:	“98” denotes Generic Date Field. “A” denotes date 8!n (YYYYMMDD) format.

Field Components	Format	Definition
Generic Field Marker	:	Identifies the field as generic.
Qualifier	4!c	Provides the business significance of the data, and is mandatory.
Delimiter 1	/	Mandatory delimiter.
Optional Issuer Code	[8c]	When SWIFT/ISO defined codes are not used, allows for the use of market, or issuer, codes with a maximum of 8 characters (e.g., GSCC).
Delimiter 2	/	Mandatory delimiter.
Data Field	34x	Data for the field. The format is specified by the letter option of the field format (e.g., 98A specifies a date format of 8!n = YYYYMMDD).
Example - Tag/Qualifier/Data Field	:98A::SETT//20030331	The colon preceding the qualifier “SETT” indicates that this is a generic field. “:SETT//” with the tag “98A” denotes that

		this field is a Settlement Date in the YYYYMMDD format.
--	--	---

2.2.5 Illustration of Message Structure

The figure below illustrates the basic SWIFT Message structure for ISO 15022 messages. For generic structural illustrations of the MT515, MT509 and MT518 messages (as specified by SWIFT), refer to Appendix D of the FICC Specification.



2.3 MT515 Message Overview

The SWIFT ISO 15022 MT515 message is used by dealers and service bureaus to submit trades to RTTM and RTRS, to correct regulatory data, to enter trade cancellations, to modify previously submitted trades, to DK inter-dealer trades submitted against them, and to submit Reversals of previously submitted (and matched) inter-dealer trades. Field 22F PROC in the Confirmation Details (CONFDET) block enables the submitter to indicate to RTTM the type of record being sent. How this field is populated for each record type is detailed below. The MT515 format will support the following message types:

Message Type	Usage
Instruct Message (:22F::PROC/GSCC/INST)	Used to submit trade details to RTTM and RTRS for trades executed by participants or approved Locked-in or Demand submitters, to report trades with customers effected by dealers, and to report IDROs. This message will support: 1) all fields required to effect trade matching; 2) certain other SWIFT mandatory fields; and 3) all required regulatory reporting fields.
Cancel Message (:22F::PROC/GSCC/CANC)	Used to initiate the cancellation of a previously submitted unmatched inter-dealer trade or a customer or IDRO trade. A Cancel Message should be an exact copy of an Instruct Message (except for having its own Sender's Reference [SEME]), and as such will contain full trade details. (A Cancel of an inter-dealer trade should contain the last version of the trade on the RTTM system as long as the trade is stored on RTTM.) ¹⁸ A Cancel of a customer trade or an IDRO should contain the last version of the trade on the RTRS system. If an inter-dealer trade has already been matched, it may not be canceled. (A reversal must be submitted to RTTM.) If the inter-dealer trade has not been matched or the trade has been recorded and registered based on the input of a valid Locked-in or Demand submitter, only the original, or Locked-in/Demand, submitter may submit a Cancel against a trade.
Modify Message (:22F::PROC/GSCC/MODFC)	Used to submit a modification to a previously entered trade. Inter-dealer trade, pre-matching – Modifications may be made on submission date (before a trade is matched or sent to settlement) to all MT515 fields except 94B TRAD (Market of Execution) and 35B (CUSIP). To change the market of execution or the CUSIP, the trade must be canceled and re-booked.

¹⁸ If the need should arise, for regulatory purposes, to cancel or modify the regulatory data about an inter-dealer trade that has been settled and purged off RTTM, include all details as in the last version stored in RTRS. Direct the Cancel or Modify message to RTTM only (Receiver = REGO, Destination = 02 only).

		<p>Inter-dealer trade, pre-matching (after submission date) and post-matching – The only fields that may be modified using this message will be the Participant Reference Number (X-ref) and regulatory fields.</p> <p>Customer and IDRO – Modifications may be made to all fields except 35B (CUSIP) and 98C (the Date portion of Trade Date and Time). The Time portion of 98C may be changed.</p> <p>All trade modifications for inter-dealer trades should be submitted to RTTM until the trade is purged off RTTM. After a trade is no longer available on RTTM, all regulatory-only changes should be submitted to the REGO system.</p>
	<p>DK Message (:22F::PROC/GSCC/TD DK)</p>	<p>Used to submit a notification to RTTM (and the Contraparty) that a participant does not know, or agree with, the inter-dealer trade submitted against it by the Contraparty. The DK message will reflect the entire details of the Match Request received by the DKing party, along with a reason for the DK. DKs may only be submitted against unmatched inter-dealer trades.</p>

All of the above record types apply to Reversals as well as trades. A Reversal (RVSL) indicator must be included in the Transaction Processing Narrative Field (:70E::TPRO//) in the Confirmation Detail Block (CONFDET) to identify that the record applies to a Reversal. Reversals cannot be done on customer trades or IDROs.

2.4 MT509 Message Overview

The SWIFT ISO 15022 MT509 Message is specified as a Trade Status Message. It is used to convey the status of each input message that has been submitted to RTTM or RTRS. The MT509 message does not contain full trade details, but rather provides the trade status along with the full set of reference numbers to enable the participant to identify the trade or record submitted. Certain status messages also include additional fields, such as reason codes for regulatory error messages.

Both RTTM and RTRS send MT509 messages to submitters. RTTM MT509s provide the trade status in the matching system and RTRS MT509s provide the regulatory status. Both types of MT509 use field 25D in the Status (STAT) Block to indicate to the recipient the type of message being sent. For RTTM MT509s, please refer to the FICC Specification, Section 4.3.

RTRS MT509s provide the submitter with the Regulator Control Number which it assigns to customer and IDRO transactions. The RTRS MT509 also indicates whether a trade message has been “affirmed” or “not affirmed”. “Affirmed” means that no regulatory errors have been found and the trade was received within the reporting deadline. “Not affirmed” means that the trade was reported late or that the dealer must modify, or cancel and replace, the trade in order to satisfy regulatory reporting requirements. “Not affirmed” MT509s also contain from one to seven error codes and accompanying text.

The trade status, 25D, in the RTRS MT509 message may be as follows:

	Status Message	Usage
	Trade Input Affirmed (:25D::AFFM//AFFI)	Sent to the trade submitter to acknowledge that its trade input has been found to be free of regulatory errors and submitted within the reporting deadline. The input may be an Instruct, Modify, DK or Cancel of any type of trade. As noted above, if RTTM accepts trade input for an inter-dealer trade and RTRS finds no errors or lateness in the regulatory data, RTRS will <i>not</i> send an additional MT509.
	Trade Input Not Affirmed (:25D::AFFM//NAFI)	Sent to the trade submitter to indicate that its trade input has regulatory errors or has been received by the FICC Access Network after the reporting deadline. The error codes and reasons for the non-affirmation will be indicated on the message (:24B::NAFI and :70D::REAS in the Reason [REAS] Block). Up to 7 codes and reasons will be in one MT509. Not more than one MT509 will be sent in response to one input record. The input may be an Instruct, Modify, DK or Cancel of any type of trade. As noted above, if an inter-dealer trade was previously rejected by RTTM, then RTRS will not send an additional message pertaining to the input. If a trade was previously acknowledged by RTTM, then RTRS may send an additional MT509 “not affirmed” message if regulatory errors or lateness is found.

The Reason (REAS) block of the MT509 contains, in addition to error codes and messages, indications whether the trade has been satisfactorily reported for regulatory purposes. See Section 2.9 and Appendix B for more on these topics.

2.5 MT518 Messages

The SWIFT MT518 Message is specified as a Market Side Securities Trade Confirmation. It is used by RTTM to convey full trade information to the transaction contra-party associated with Instruct, Cancel, and Modify messages submitted against it. Since RTRS does not send MT518 messages to users, this message is not further described here.

2.6 MT599 Message Overview

The MT599 Message is specified by SWIFT as a Free Format Message. RTTM uses this message to convey system administrative information to participants. RTRS does not generate MT599 messages.

The MSRB Rule G-14 defines the RTRS Business Day as the time during which trades must be reported within 15 minutes. RTRS is in operation from 6:00 AM to 9:00 PM

EST on MSRB business days. The MSRB system holiday schedule can be found here: <https://msrb.org/System-Status>.

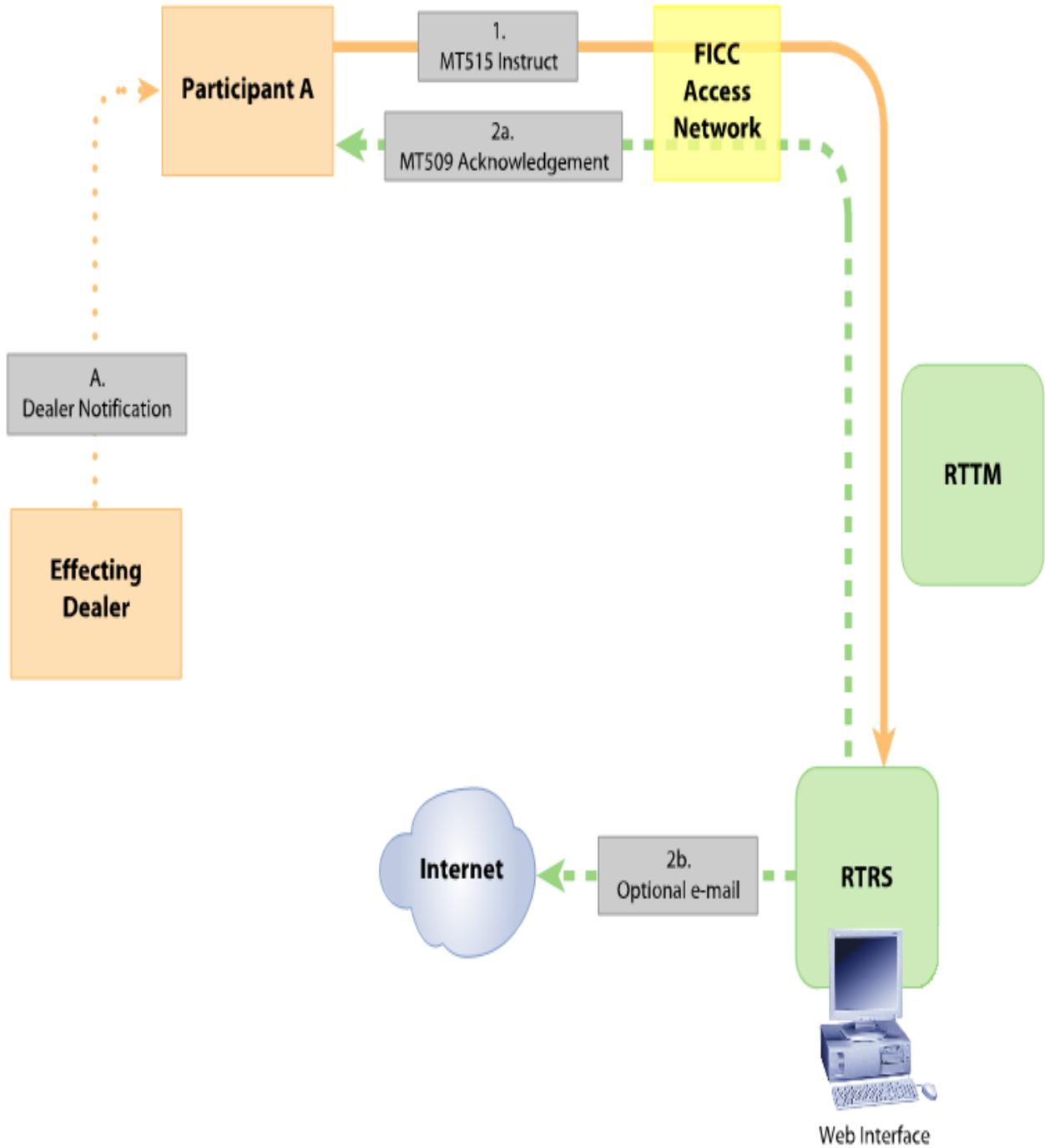
FICC has defined the following MT599 messages.

	Message	Usage
1.	RTTM Start-of-Day Notification (:79:GSCC/GADM.../GSOD/)	Sent in the beginning of each business day to inform a member that the RTTM system is available.
3.	RTTM Submission Cutoff End-of-Day Message (:79:GSCC/GADM.../EDCS/)	Sent when participants may no longer submit transactions to be included in RTTM processing for that day. Any transactions submitted to RTTM after this point will be queued to be included in the next business day's processing.
4.	RTTM/RTRS Processing End-of-Day Message (:79:GSCC/GADM.../EODC/)	Sent to members to inform them that the RTTM system has completed processing for that business day, and that all interactive output to be generated that day has been transmitted. This message also indicates that all RTRS transparency and interactive output has been transmitted.

2.7 Customer Trade Flow

The flow of data in reporting customer trades to RTRS is shown in the following chart. This shows a case in which the trade is reported within the 15-minute deadline and has no errors. Appendix A shows examples of different data flows, such as modification of customer trades.

Customer Trade Reported by Participant



Message Flow Explanation:

A. **Outside of RTTM/RTRS systems** – Effecting dealer notifies participant of customer trade.

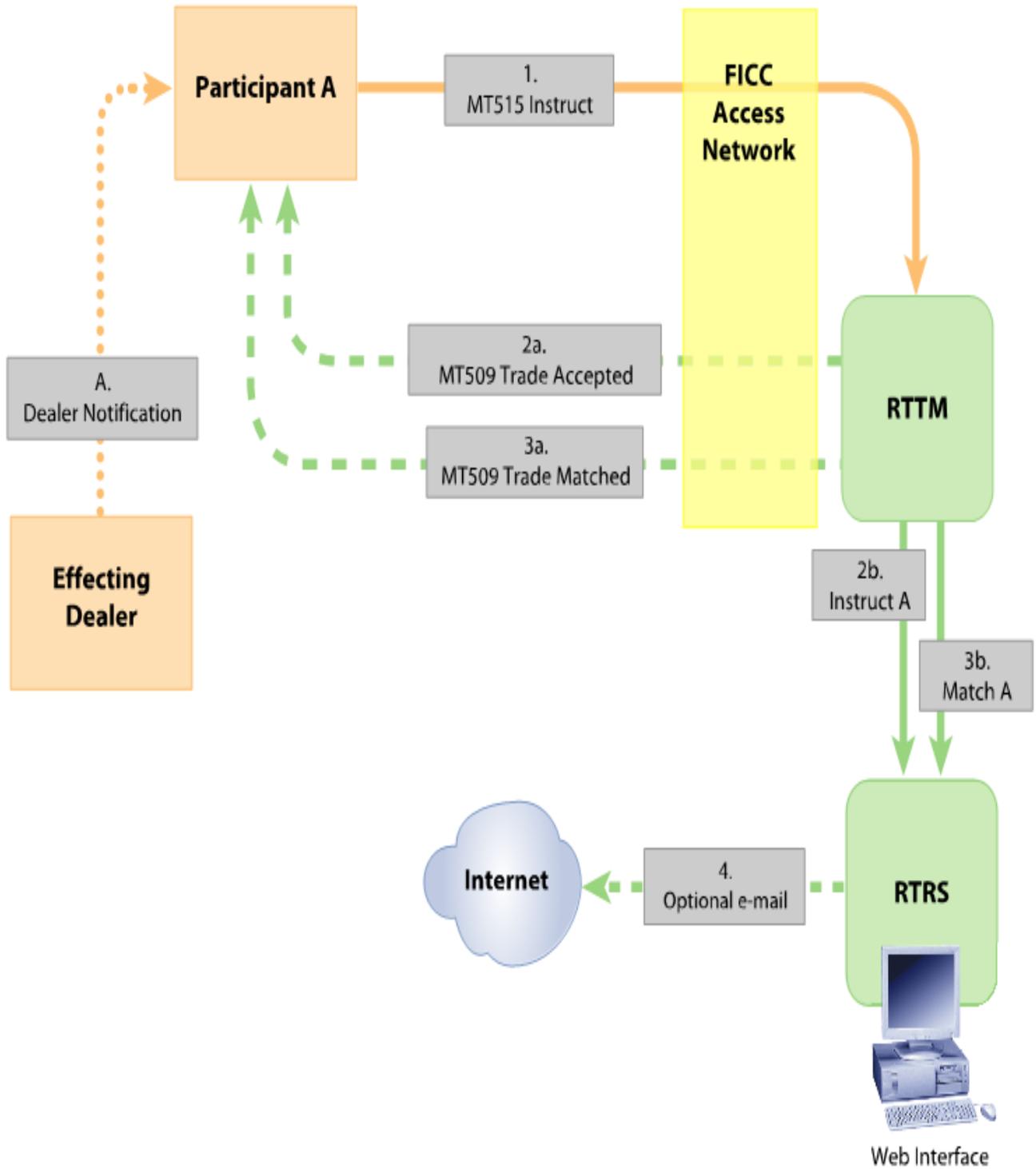
1. **MT515 Instruct** – This input message conveys the customer trade data submitted by Participant A for regulatory reporting to RTRS. The participant sends the Instruct to the FICC Access Network, which timestamps it and routes it to RTRS.
- 2a. **MT509 Trade Affirmed** – This output message is sent to Participant A acknowledging that its trade has been accepted by RTRS. In this example, the trade was reported on time and without errors. This message also provides the Regulator Control Number assigned by RTRS in the TRRF field. The MT509 is sent to the Participant via the FICC Access Network.
Trade Details and Regulatory Status – RTRS displays the trade details and regulatory status on the RTRS Web Interface. Either the effecting dealer or the participant can view the trade on the screen.
- 2b. **E-mail to Internet** – RTRS sends an e-mail, if requested by the effecting dealer or the participant, with the trade details and regulatory status.

2.8 Inter-Dealer Trade Data Flow

The following chart shows the dealers' interaction with RTRS in reporting an inter-dealer trade via RTTM. Not all details of the flow of RTTM messages are shown; see the FICC Specification, Section 2.8, for full details.

This chart shows a case in which the trade is reported within the 15-minute deadline and has no errors. Appendix A shows examples of different flows, such as modification of regulatory data in an inter-dealer trade.

INTER-DEALER TRADE ACCEPTED, NO REGULATORY ERRORS (Chart Depicts Relationship of One Side to RTTM/RTRS)





This chart shows the relationship of dealers on one side of the trade to RTTM and RTRS.

Message Flow Explanation:

- A. **Outside of RTTM/RTRS systems** – Effecting Dealer notifies Participant of inter-dealer trade.
 - 1. **MT515 Instruct** – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. **MT509 Trade Accepted** – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. **Instruct Event Message** – RTTM sends copy of Participant input to RTRS.
 - 3a, 3b. **MT509 Trade Matched** – This output message is sent to Participant informing it that the trade is matched. This message also contains the Match Control Number (COMM). A copy is sent to RTRS.

In this example, the trade was reported on time and without errors. Therefore, RTRS does not send an additional MT509.

Trade Details and Regulatory Status – RTRS displays the trade details and regulatory status on the RTRS Web Interface. Either the effecting dealer or the participant can view the trade on the screen. RTTM also displays the trade details and regulatory status on the RTTM Web screen for the participant.

- 4. **E-mail to Internet** – After step 2b and also after steps 3a/3b, RTRS sends an e-mail, if requested by the effecting dealer and/or the participant, with the trade details and regulatory status.

2.9 Error Messages

As noted, RTTM and RTRS will send MT509 messages to submitters informing them of any errors found. Inter-dealer trades that are rejected by RTTM will not be accepted by RTRS, so submitters must correct any RTTM errors before they will receive any MT509 message from RTRS. RTTM reject messages are in Appendix B.

Following are the RTRS error messages, organized by data field in the input message. Appendix B.1 has the error messages organized by error code.¹⁹

¹⁹ Text that is abbreviated in Appendix B.1 has been expanded here. Error messages may be changed and new messages added from time to time (see www.msrb.org).

- Reference number
 - Trade report has participant xref number already in use - change xref
 - Dealer reference number missing
 - Trade report has dealer reference number already in use
 - Reversal reference number error
 - Reversal control number missing
- Dollar price
 - Dollar price missing for regular way CUSIP
 - Dollar price out of reasonable range
 - Dollar price in wrong format
- Regulatory Dollar Price
 - Regulatory Dollar Price missing
 - Seller and buyer Regulatory Dollar Prices differ
- Yield
 - Yield specified twice in the message
 - Yield out of reasonable range
 - Yield in wrong format
- Accrued interest
 - No accrued interest submitted, and trade not shown as having been traded flat
 - Calculated accrued interest does not match submitted accrued interest
 - Accrued interest submitted, but trade indicated as having been traded flat
- Commission/concession
 - Commission more than 10 percent of dollar price
 - Commission present on inter dealer trade
 - Commission in wrong format
 - Commission present on principal trade
 - Concession present on IDRO or customer trade
 - Concession in wrong format
- Combinations of data elements
 - Accrued interest different on buyer and seller sides
 - Yield greater than dollar price
 - Reversal control number missing or incorrect on your or contraparty report
- Trade date
 - Modified trade date is greater than instruct receipt date
 - Trade date in the future
 - Trade date or time in wrong format
 - Modify or cancel received more than two years after trade date
- Time of trade

- Trade time in the future
- Time of trade before 0600 or after 2100
- Seller and buyer times of trade differ by more than 15 minutes
- Modified interdealer trade time greater than instruct receipt time
- Modified customer or IDRO trade time greater than instruct receipt time
- Settlement date
 - Settlement date is before trade date
- CUSIP
 - No CUSIP data available to RTRS
 - CUSIP appears to be invalid
 - CUSIP check digit missing or incorrect
 - Cannot change CUSIP
- Par value
 - Par value not a multiple of 1000
 - Par value in wrong format
 - Par value should not be in units
 - Par value may not be zero
- Effecting dealer symbol
 - Dealer symbol missing
 - Dealer symbol not known to MSRB
 - Cannot modify effecting dealer symbol
- Clearing broker ID
 - Clearing ID not known to MSRB
 - Cannot modify clearing broker ID
- Submitter ID
 - Submitter not known to MSRB
- Contra-party ID
 - Contra dealer symbol missing
 - Unknown contra party broker symbol
 - Contra party you indicated is not the contra party on the matching side
- Symbol combinations
 - Unknown dealer submitter combination
 - Unknown clearing and contra symbol combination
 - Unknown dealer clearing combination
- Market of execution
 - Market of execution code not muni
- Dealer capacity
 - Dealer capacity missing

- Special condition indicator
 - Special condition indicator inconsistent with trade history
 - Special condition indicator inconsistent with trade details
 - Invalid special condition indicator
 - Seller and buyer alternative trading system special condition indicator differ
 - Alternative trading system special condition present on a customer trade
- Destination
 - Interdealer submission must be sent to both RTTM and RTRS
- Trade indicator
 - Trade indicator is not locked in on IDRO report
 - Trade indicator is not cash on customer report
- Unsuccessful Modify attempt
 - No regulatory data changed. Any previous errors still stand.
 - Cannot modify match data with regulatory only modify. Submit to RTTM
- Late reporting
 - Trade reported after deadline
 - Instruct received with trade date prior to Jan 2 2002
- Unmatched Modify or Cancel
 - Modify or cancel does not match any stored side
 - Modify or cancel received for trade already canceled
 - Cannot identify previous record. Provide TID or regulatory control number.
- Unparsable message
 - Unparsable MT515 message
- Satisfactory message
 - Acknowledgment. No error conditions found.

If no errors are found in an input message and it is received by the deadline, RTRS will send an MT509 that is an “affirmation” without any message included.

Each RTRS error message has an error code and text – for example, “U311 UNSAT Cannot change CUSIP”. Here U311 is the error code. The text portion begins with an abbreviation that indicates whether the message is satisfactory for regulatory reporting purposes. The following are used:

UNSAT	Unsatisfactory for regulatory reporting purposes.
QUEST	Questionable. Examine data and correct as necessary.
LATE	No response needed. Report was late.
SATIS	Acknowledgement. No errors found.

Dealers are required to review trade status information from RTRS and to correct errors in RTRS submissions as soon as possible.²⁰ To provide information about incorrect or potentially incorrect input, RTRS returns error codes to the dealer when it finds errors or questionable conditions in submissions. The first character of the error code (see Appendix B.1) indicates the action required by the dealer:

- Any “X” error means that the submission must be replaced.
- Any “U” error (in the absence of any “X” errors) means that the submission contains an error or is incomplete. All “U” errors require the dealer to modify or cancel and replace the submission.
- Any “Q” error (in the absence of “X” or “U” errors) requires prompt dealer attention and if an error is found, prompt dealer action is required to correct the submission. For example, error code Q221 indicates “QUESTIONABLE – Trade time in the future.” A dealer that receives error code Q221 must examine the submission to ensure the time the trade was submitted did not occur prior to the time the trade was executed.
- RTRS is designed not to allow “N” (late) submissions to be corrected to be made timely.

If the message has more than one error, the correct dealer response depends upon the “worst” error. “S”, found in message S90A (SATIS), indicates the message is acknowledged and no response is needed.

The Regulatory Status Code (RSTA) in the MT509 supplements the LATE/QUEST/UNSAT abbreviation about the trade by indicating a single “regulatory status” for the trade, taking into account multiple errors and prior messages about the trade. RSTA is used primarily by RTTM Web to determine whether to display a trade in the “Satisfactory” or “Questionable” area of the Web screen. See Appendix B.3 for a table of RSTA values and additional information for programmers who may wish to make use of the RSTA information.

2.10 Data Format Differences

SWIFT ISO 15022 messages employ certain standards for data fields that are different from those currently supported by NSCC. RTTM may support a different size field than SWIFT records allow. When the real-time system field sizes are smaller than the current fields, the differences are summarized in the following chart. Please note that where the NSCC field is smaller than the SWIFT field, RTTM will support the smaller value.

²⁰ See Rule G-14 RTRS Procedures (a)(v): “. . . Trade status information from RTRS indicating a problem or potential problem with reported trade data must be reviewed and addressed promptly to ensure that the information being disseminated by RTRS is as accurate and timely as possible.” Also see “Questions and Answers Regarding the Real-Time Transaction Reporting System (RTRS),” MSRB Notice 2005-08 (January 26, 2005), question 15.

Participants should expect to populate these fields with a value no larger than the RTTM maximum.

Field	NSCC Format Restrictions		
	SWIFT Maximum	RTTM Maximum	
Dollar Price (DEAL//PRCT)	15d	13d	4 whole dollars 8 decimal places
Yield (DEAL//YIEL)	15d	8d	3 whole dollars 4 decimal places
Settlement Amount ²¹	15d	13d	10 whole dollars 2 decimal places
Accrued Interest Amount	15d	10d	7 whole dollars 2 decimal places
Turnaround Number	15c	4c	4 alphanumeric
Quantity	15d	10d	9 whole numbers

RTTM and RTRS standards also differ in some respects from those previously used in the MSRB's Customer Trade Reporting System (CTRS). The differences are also shown in the following chart. Input to RTRS must conform to whichever is the most stringent of the NSCC, RTTM and RTRS format restrictions.

Field	Format Restrictions		
	CTRS Maximum	RTTM Maximum	
Dealer X-REF (dealer control no. and previous reference no.)	20 char	16x	16 printable ASCII symbols
Commission	8 char	9d	whole dollars 2 decimal spaces

Part 3: Communications Overview Interactive

In order to ensure safe, reliable submission of Trade Messages and delivery of status messages, FICC has implemented, as part of its real-time processing architecture, a message exchange facility and a private communications network. **As noted in the Introduction, at this point in time FICC does not intend to use the SWIFT network**

²¹ All amount fields preceded by USD will have 2 decimal places. Applies to Settlement and Accrued Interest Amounts.

as a communications facility. These messages are intended, however, to be compliant with SWIFT requirements to facilitate utilization of the SWIFT network at a later date, if ultimately deemed appropriate.

FICC utilizes the MQ Series product from IBM to support all of the FICC Interactive Message Specifications. This product facilitates a reliable message exchange protocol, which deals completely with sequence numbers, connection recovery and other messaging-related issues. The use of this product precludes the traditional requirement of developing a custom message exchange protocol for each new clearing corporation interface. MQ Series is available for the majority, if not all, of the systems platforms in use at participants' data centers (including MVS, VMS, most common versions of Unix, and NT). Many DTCC members already use this product in-house, to connect with the clearing banks, to connect with FICC's existing RTTM products supporting Government Securities and Mortgage Backed Securities, or for other DTCC services.

FICC's messaging implementation provides a "To RTTM" queue and a "From RTTM" queue, specific to NSCC Eligible Fixed Income Securities, for each participant. Additional details, including the full naming convention that will be utilized, will be distributed to participants separately.

Participants can connect to FICC's message exchange facility through FICC's private communications network. Access to all RTTM systems and other FICC services have been provided through a full, secure, TCP/IP network, known as the Participant Access Network, since early 1998. Details of that network were provided in a New Service Bulletin dated June 3, 1998.

Part 4: Message Specifications

This section contains the detailed specification for the MT515 and MT509 messages used to support Real-Time Matching. These are followed by explanations of selected fields that have specific uses in regulatory reporting in RTRS.

Sections 4.1, 4.2, 4.4 and 4.5 are of interest to participants preparing messages supporting matching and regulatory reporting. They are also of interest to non-participants and service bureaus who originate data for regulatory reporting. Section 4.3 is an explanation of the use of MT515 fields for regulatory reporting. This subsection is intended for any dealer who reports trades to the MSRB.

These specifications include substantial portions of text taken from the FICC Specification, but, regarding inter-dealer trades, these specifications are meant to supplement rather than replace the FICC Specification.

The subsections are:

Section 4.1 - Message Format Guidelines

Provides formatting rules and conventions for NSCC interactive messaging using SWIFT ISO messages.

Section 4.2 - MT515 Message

- **Section 4.2.1** – Contains the layout and field descriptions for the MT515 message used by participants to send instructions to the RTTM Access Network.
- **Section 4.2.2** – Provides a detailed analysis of those fields that can appear on all MT515 record types.

Section 4.3 – Explanation of Selected Fields

Explains the use of selected fields for regulatory reporting.

- **Section 4.2.1** – Dollar price, yield, accrued interest, and settlement amount
- **Section 4.2.2** – Other fields

Section 4.4 - MT509 Message

Contains the layout and field descriptions for the MT509 message. The message is created by RTRS to notify dealers whether trade input is “affirmed” or “not affirmed” for regulatory purposes.

4.1 Message Format Guidelines

Formatting Rules

The following Message and Message Field rules apply to all messages in the Interactive Message Specification:

- | | |
|--------------------------|--|
| Direction | – Messages are sent either to or from the RTTM Access Network. |
| Variable Length | – All messages can vary in length up to a maximum allowable number of characters per message type. |
| Header Terminator | – All messages begin with a standard fixed length header. |
| | – All messages end with a standard terminator sequence reflected by a Carriage Return/Line Feed and a Dash (“CRLF –”). |
| Message Type | – Each message belongs to a specified message type. |

- Message Fields** – A message is composed of one or more message fields.
- Character Set** – A-Z, a-z, 0-9, white space and the following punctuation “:./,-”

Message Field Rules

- Field Tag** – Each field begins with a field tag.
- Tag Format** – Each tag is composed of 2 digits and an optional character (2!c[1a]).
- Tag Delimiter** – Each tag is prefixed and suffixed by the character “:” (e.g., :23G:).
- Field Data** – Field data (including qualifiers and subqualifiers) immediately follows the tag suffix delimiter. Generic tags are prefixed by an additional “:”.
- Data Format Data Elements**
 - Data conforms to format rules for a specified tag.
 - Field data may be divided into multiple elements or subfields.
- Qualifiers** – Qualifiers within a data field provide additional format definition. If a qualifier is used, it must appear immediately after the tag suffix delimiter (e.g., :98A::SETT). If further data is required after the qualifier, and the data complies with SWIFT standards, the qualifier is delimited by the characters “//” and the data follows (e.g., :98A::SETT//20030331 or :20C::MAST//19960815). If the data is RTTM or RTRS specific, then the GSCC issuer code is included (e.g., :95R::BUYR/GSCC/PART8520).
- Field Delimiter** – The field delimiter sequence is Carriage Return Line Feed, “CRLF” (ASCII Character 13, ASCII Character 10). This sequence immediately follows the data. The combination of Carriage Return Line Feed, Colon (“CRLF:”) indicates the end of one field and the beginning of the next.

Format Conventions

Please note that all the layouts for each of the messages (included in this Section of the document) are organized using the following columns of data:

Column Heading	Description
M/O	The M/O column defines whether the field is always Mandatory, or is Optional in the particular message and sequence according to SWIFT requirements. This column does not provide information as to whether the field is required or optional for RTTM or RTRS. Please refer to section 4.2, which provides a list of required fields
Tag	The Tag column defines the exact tag value that must precede the field. Tags are always delimited by “:” (meaning a “:” would be the character immediately before and after the tag (e.g., “:98A:” indicates a date with a format of YYYYMMDD will follow).
Block or Qualifier	The Block or Qualifier column specifies the Block Name in the case of a start block (16R) or end block (16S) tag. Otherwise, it specifies the required qualifier for the tag (e.g., :98A::SETT indicates a Settlement Date field).
Subqualifier/Options	The Options column specifies the different options available for individual qualifiers for a tag. Each tag, qualifier and option combination uniquely specifies a data element.
Field Description	The Field Description column provides a text description of the purpose or use of a data field.
Data Format	The Data Format column specifies the size and characters allowed within a data field, as specified by SWIFT . The Field Specifications that follow each layout indicate how each field should be populated for real-time input/output. The format provided in this column reflects the data that the participant must populate the field with (e.g., :98A::SETT// has a format of YYYYMMDD).

 **It should be reiterated that the Mandatory/Optional (M/O) Field on the layout indicates if the field is SWIFT mandatory or optional for the message/sequence.** It does not denote, however, if the field is required for submission to RTTM or RTRS. Readers must refer to Section 4.2.2 of this document to identify required fields. Those fields that are SWIFT mandatory and/or NSCC mandatory must be reflected on the MT515, or the message (Instruct, Modify, Cancel, or DK) will be rejected by RTTM. If MSRB mandatory fields are absent, RTRS will send an MT509 “not affirmed” error message.

The Data Format field on the layouts is intended to reflect the format of the data that must be used to populate the field. For example, the format for the Settlement Date field (:98A::SETT//20030331) is reflected as “YYYYMMDD”. In addition, all fields on the SWIFT messages are left justified, and if the field has a decimal format (d), it must use a decimal comma, rather than a decimal point.

As a supplement to the layout, a detailed description of each field format follows, which reflects the options, defines the usage and provides an example of each field.

The following characters may appear in the Data Format Column or in any discussion of data format and content:

Character	Meaning	Example Format	Example Usage
A	Upper Case Alpha Characters	6a	ABCDEF
C	Alphanumeric Characters (upper case only)	6c	AB12EF
D	Decimal Number (decimal comma)	15d	2035,45
E	Space	1e	(1blank space)
N	Numeric Characters	8n	20011228
X	Any Printable ASCII Symbol	20x	Anytime & Anyplace
/	The literal "/" as a separator	6c/2a	AB12EF/NY
[]	Optional element format	[/4c]	[optional data - 4 characters]
[N]	Optional "sign" (negative) format	[N]	:19A::SPCN//USDN500,45
!	Fixed length field	12!c	ABCDEFGHIJKL

All fields are, by definition, variable in length with a maximum field size specified, unless a fixed length format is defined by inclusion of the "!", in which case the size specified is the fixed field size. In the case where the data value in the fixed length field is smaller than the field size specified, the data should be left justified with trailing blanks, as in the Password and Sender fields of the following example.

Typical Message Form

Form	Example
<pre> <PASSWORD><SENDER><MESSAGE TYPE> <RECEIVER><cr><lf> :<BLOCK START TAG>:<BLOCK NAME><cr><lf> :<GENERIC TAG 1>::QUALIFIER//DATA FIELD 1 <cr><lf> :<TAG2>:DATA FIELD2<cr><lf> :<GENERIC TAG 3>::QUALIF//ISSUER CODE/DATA FIELD3<cr><lf> :<BLOCK START TAG>:<BLOCK NAME><cr><lf> :<GENERIC TAG 4>::QUALIFIER//DATA FIELD 3<cr><lf> :<BLOCK END TAG>:<BLOCK NAME><cr><lf> :<BLOCK END TAG>:<BLOCK NAME><cr><lf> </pre>	<pre> ABCDEF GH 9500 515/000/GSCC NSCCTRRS :16R:GENL :20C::SEME//004354NY4355 :23G:NEWM :22F::TRTR/GSCC/CASH :16R:LINK :20C::MAST//ABCD1234 :16S:LINK :16S:GENL </pre>

As can be seen from the above example, blocks are demarcated by “start” (16R) and “end” (16S) block tags, with an associated block name. The tags contained within provide the data associated with the purpose of the block. Subsequent blocks, (i.e., the confirming party block), may be repeated as necessary (i.e., to identify the buyer of securities, the seller of securities, etc.) as specified by SWIFT.

Generic fields, as previously described in this document, are designed to serve a particular function, with a qualifier code specifying a specific business purpose to that function. In the preceding example, the “20C” tag is a generic reference number, and the “SEME” qualifier in the GENL block indicates that this is the Sender’s Message identifier. In the LINK subsequence, however, 20C is used to provide a Master Reference Number (External Reference). Processing code can thereby be designed to be reused for creating or validating generic fields as the fields are reused within a message, or across messages.

Message Header Format

M/O	Tag	Block or Qualifier	Options	Data Format	Field Description
M				12!c	Password
M				8!c	Sender
M				3!n/3!n/4!c	Message Type
M				8!c	Receiver

The Message Type Field contained in the message header defines the purpose of the message. As indicated previously, this message header will be utilized on all RTTM/RTRS-interactive messages: MT515, MT509, MT518 and MT599. The password field will be blank– filled on all RTTM/RTRS outgoing messages (MT509, MT518 and MT599).

4.2 MT515 Message

4.2.1 MT515 Message Specification

This section includes the detailed specification for the MT515 message. The message type is used to send instructions to RTTM or RTRS. The MT515 is used for the following record types:

- Instruct
- Cancel
- Modify
- DK

All of the above record types also support Trades as well as Reversals of previously submitted trades.

Throughout this section, data fields that support regulatory reporting requirements are marked with the label "regulatory field," which is highlighted. Information regarding the use of fields for regulatory purposes has been added here to the FICC information.

MT515 General Format					
				Message Header	
M				Password	12!c
M				Sender	8!c
M				Message Type	3!n/3!n/4!c
M				Receiver	8!c
M	:16R:	GENL		Mandatory Block Start	
M	:20C:	:SEME//		Sender's Reference for this Msg	16x
M	:23G:	NEWM		Message Function = New <i>or</i>	4!c
		CANC		Cancel	
O	:98C:	:PREP//		Preparation Date/Time	YYYYMMDDHHMMS S
M	:22F:	:TRTR/	GSCC/CASH	Bilateral Trade Indicator <i>or</i>	4!c
			GSCC/TRLK	Locked-in Trade Indicator <i>or</i>	
			GSCC/TRDC	Demand Trade Indicator	
M	:16R:	LINK		Mandatory Repeat Block Start	
M	:20C:	:MAST//		Master Reference Number (External Reference)	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:PREV//		Previous Reference Number (Previous External Reference)	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:LIST//		RTTM Assigned Reference (TID)	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:BASK//		ABS Turnaround Number	16x
M	:16S:	LINK		Repeat Block End	

MT515 General Format					
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:TRRF//		Regulator Control Number	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:COMM//		Match Control Number	16x
M	:16S:	LINK		Repeat Block End	
M	:16S:	GENL		Block End	
M	:16R:	CONFDET		Mandatory Block Start	
M	:98C:	:TRAD//		Trade Date & Time	YYYYMMDDHHMMS S
M	:98A:	:SETT//		Settlement Date <i>or</i>	YYYYMMDD
M	:98B:	:SETT//	WISS	Settlement to be completed when the security is issued	4!c
M	:90A:	:DEAL/	/PRCT/	Deal Price – Percentage <i>or</i>	15d
			/YIEL/	Yield	
O	:94B:	:TRAD/	GSCC/NYCP	Place of Trade – Market of Execution – NYSE Corporate <i>or</i>	4!c
			GSCC/OTCP	Over-the-Counter Corporate <i>or</i>	
			GSCC/OTMU	Over-the-Counter Municipal <i>or</i>	
			GSCC/OTUI	Over-the-Counter Unit Investment Trust	
O	:19A:	:SETT/	/USD	Settlement Amount	15d
M	:22H:	:BUSE/	/BUYI	Trade Type – Buy <i>or</i>	4!c
			/SELL	Sell	
O	:22F:	:PRIC/	GSCC/WGTP	Type of Price – Weighted Price	4!c
O	:22F:	:PROC/	GSCC/INST	MT515 Record Type – Instruct <i>or</i>	4!c
			GSCC/CANC	Cancel <i>or</i>	
			GSCC/MDFC	Modify <i>or</i>	
			GSCC/TDDK	DK	
O	:22F:	:TTCO/	GSCC/TSQS	Trade Type/Target Indicator – QSR Trade <i>or</i>	4!c
			GSCC/TSAB	ABS Trade <i>or</i>	
			GSCC/TTQS	Target QSR Trade <i>or</i>	

MT515 General Format					
			GSCC/TTAB	Target ABS Trade	
M	:22H:	:PAYM/	/APMT	Against Payment Indicator	4!c
M	:16R:	CONFPRTY		Mandatory Repeat Block Start	
M	:95R:	:BUYR/	GSCC/PART	Party = Buyer	34x
O	:20C:	:PROC//		Buyer (Contra) X-ref	16x
O	:70C:	:PACO/	/GSCC	Participant Contact Narrative	(4*35x)
			/TDID	Buyer (Contra) Trader ID	20c
			/BRCH	Branch Sequence Number	3!x4!x
O	:70E:	:DECL/	/GSCC	Narrative/ Additional Reference Numbers/ Information	(10*35x)
			/CORR	Party = Buyer's Correspondent firm	5c
			/COCO	<i>Reserved for future use.</i>	5c
O	:22F:	:TRCA/	/AGEN	Capacity Indicator – Acting as Agent Indicator <i>or</i>	4!a
			/PRIN	Acting as Principal Indicator	
M	:16S:	CONFPRTY		Repeat Block End	
M	:16R:	CONFPRTY		Mandatory Repeat Block Start	
M	:95R:	:SELL/	GSCC/PART	Party = Seller	34x
O	:20C:	:PROC//		Seller (Contra) X-ref	16x
O	:70C:	:PACO/	/GSCC	Participant Contact Narrative	(4*35x)
			/TDID	Seller (Contra) Trader ID	20c
			/BRCH	Branch Sequence Number	3!x4!x
O	:70E:	:DECL/	/GSCC	Narrative/ Additional Reference Numbers/ Information	(10*35x)
			/CORR	Party = Seller's Correspondent Firm	5c
			/COCO	<i>Reserved for future use.</i>	5c
O	:22F:	:TRCA/	/AGEN	Capacity Indicator – Acting as Agent Indicator <i>or</i>	4!a
			/PRIN	Acting as Principal Indicator	
M	:16S:	CONFPRTY		Repeat Block End	

MT515 General Format					
M	:36B:	:CONF/	/FAMT/	Quantity as Face Amount (Par) <i>or</i>	15d
			/UNIT/	Quantity as Units / Shares	
M	:35B:	/US/		Security Identifier – CUSIP	4 * 35x
O	:70E:	:TPRO/	/GSCC	Trade Instruction Processing Narrative	(10*35x)
			/DKRS	DK Reason (see Appendix B)	4!c
			/DEST	Destination Indicator (see Appendix B)	2!c
			/ITYP	Issue Type (see Appendix B)	2!c
			/ORDT	Order Time	6!n (HHMMSS)
			/SDAD	Settlement Date Adjustment	4n
			/RVSL	Trade Reversal Indicator	4!c
			/SPXR	Special Condition Indicator (previously Special Price Reason Code) (see section 4.3.2 and Appendix B)	4!c
			/POVR	Price Override Option	4!c
			/RCTL	Reversal Control Number	16x
			/YIEL	Yield	[N]15d
			/RGDP	Regulatory Dollar Price	13d
M	:16S:	CONFDET		Block End	
M	:16R:	SETDET		Optional Block Start	
M	:22F:	:SETR/	/RPTO	Settlement Indicator – Reporting-only <i>or</i>	4!c
			GSCC/STRD	Settlement Type Indicator – Special Trade <i>or</i>	4!c
			GSCC/CPRO	Comparison Only	
M	:16R:	AMT		Optional Block Start	
M	:19A:	:SPCN/	/USD	Special Concessions <i>or</i>	[N]15d
		:EXEC/	/USD	Executing Broker Commission	[N]15d
M	:16S:	AMT		Block End	
M	:16R:	AMT		Optional Block Start	
M	:19A:	:ACRU/	/USD	Accrued Interest Amount	15d
M	:16S:	AMT		Block End	
M	:16S:	SETDET		Block End	
M	:16R:	OTHRPRTY		Optional Block Start	

MT515 General Format					
M	:95Q:	:MEOR//		Originator of message (if other than the Sender)	4!c//6!c
M	:16S:	OTHRPRTY		Block End	

MT515 Field Specifications

MT515 Field Specifications		
Message Header	Each Message must contain a message header. All header fields are mandatory fixed format with trailing blanks, where required.	
Password	12!c	A password will be assigned by FICC enabling the sender to submit trades on behalf of specific participants.
Sender	8!c	Participant ID
Message Type	3!n/3!n/4!c	The first three characters indicate to the recipient the message type (515); the second three positions reflect the version of the message interface (currently always 000). The last four characters indicate the issuer code to be used in the message (always "GSCC").
Receiver	8!c	NSCCTRRS (NSCC Trade Registration and Reconciliation System) will always be the recipient of the MT515 messages sent to RTTM-only, or sent to <u>both</u> RTTM and RTRS. NSCCREGO (NSCC Trade Reporting – Regulatory-Only) will be the only recipient of the regulatory-only MT515 messages.
GENL	This Mandatory block provides general information regarding the message. It appears only once in a trade message.	
20C	<p>Sender Message Reference SEME// – This field contains the sender’s message reference number. It is mandatory and must contain a unique number to unambiguously identify each message sent to RTTM/RTRS. (This is a communications message number, not a trade number.) It is suggested that participants use a number that includes a date followed by either a timestamp or a sequence number. In this way uniqueness can be ensured.</p> <p> While the SWIFT message accommodates both Upper and Lower-case alphanumeric and certain symbols, for RTTM purposes, this field must be populated with an upper case alphanumeric value. It cannot contain symbols or hyphens.</p> <p style="text-align: right;"><i>e.g., :20C::SEME//200303310001</i></p>	
23G	Function of the Message	

MT515 Field Specifications	
	<p>This mandatory field identifies the function of the message. It will either be a new message (NEWM) for an Instruct, Modify or DK, or CANC for a cancellation of a previous message.</p> <p>NEWM – will be used for a new trade, a trade modification, or a DK message.</p> <p>CANC – will be used to request the cancellation of a trade.</p> <p style="text-align: right;"><i>e.g., :23G:NEWM</i></p>
98C	<p>Preparation Date and Time</p> <p>PREP// -This RTTM mandatory field contains the date and time the message sent to RTTM/RTRS was prepared.</p> <p> The “C” format for this (98) tag indicates a date/time format of “YYYYMMDDHHMMSS”.</p> <p style="text-align: right;"><i>e.g., :98C::PREP//20030331102015</i></p>
22F	<p>Trade Transaction Type Indicator (TRTR)</p> <p>This mandatory field specifies whether the trade (or Reversal) is Bilateral, Locked-in or Demand.</p> <p>TRTR/GSCC/CASH – This qualifier/option should be used on all trades requiring two-sided (Bilateral) matching and on customer trades. Trade reports targeting Syndicate trades must also use this qualifier option.</p> <p>TRTR/GSCC/TRLK – This qualifier/option should be used on Locked-in trades. QSR and IDRO trade reports must use this qualifier option.</p> <p>TRTR/GSCC/TRDC -This qualifier/option should be used on Demand trades. Syndicate trades must use this qualifier option.</p> <p style="text-align: right;"><i>e.g., :22F::TRTR/GSCC/TRLK</i></p>
LINK	<p>The LINK Block can be repeated for the various reference qualifiers required on a Trade Contract or report. It is intended to provide the required information to identify the trade. Each reference number must be enclosed within a Start Link Block (:16R:LINK) and End Link Block (:16S:LINK). Each LINK repeating subsequence is within the GENL Block. At least one LINK sequence is required on the MT515 message.</p>
20C	<p>Reference</p> <p>The Reference Numbers provided by the participant must contain Upper Case AlphaNumeric characters – and must not contain symbols or hyphens. As indicated above, each reference number must be enclosed in a LINK Start and End block. MT515 DK messages (submitted against contraparty trades) will not contain reference numbers in this sequence, but require the MAST qualifier to be included on the record.</p> <p>MAST// – Master Reference Number – This qualifier contains the Dealer’s Reference Number for the trade (External Reference Number [“X-REF”]). This field must be unique for an Instruct. <u>For inter-dealer trades, IDROs and QSRs, it should be populated with the primary reference number that the participant will use to track trades on the RTTM and RTRS systems. For customer trades, it should be populated with the primary reference</u></p>

MT515 Field Specifications

number that the effecting dealer will use to track trades on the RTRS system. This qualifier is mandatory for inbound MT515 INSTRUCT and DK messages. For DKs this field should always be populated with the value "NONREF". For inter-dealer trade Cancels and Modifies, the participant can send the External Reference Number (MAST) and/or the RTTM Reference Number (LIST) or, after matching, the Match Control Number (COMM) may be used on Modifies. For customer trade and IDRO Cancels and Modifies, the dealer can send the External Reference Number (MAST) and/or the Regulator Control Number (TRRF).

PREV// – Previous Reference Number – This qualifier is used on either Trade Modify or Trade Cancel MT515 records. On Modify records, it is used to modify the reference number and should contain the Participant's Previous External Reference Number. For MT515 Cancel records you are submitting (:23G:CANC and :22F::PROC/GSCC/CANC in the Confirmation Details (CONFDET) block), this field should always be populated with the value "NONREF". Do not use this field on Instruct or DK records.

LIST// – RTTM Reference Number – This qualifier contains RTTM's reference number (TID) generated for the trade upon submission. RTTM LISTs (TIDs) will be generated only for inter-dealer trades. For pre-match Cancels and Modifies, the participant can send the External Reference Number (MAST) and/or the RTTM Reference Number (LIST) to identify the trade. For post-match Modifies of inter-dealer trades, the participant must include either X-ref (MAST), the RTTM assigned TID (LIST), or the Match Control Number (COMM). This field will not be used on Instruct or DK records.

BASK// – ABS Turnaround Number – This qualifier is reserved for the ABS Turnaround Number.

TRRF// – Regulator Control Number – regulatory field – This qualifier specifies the control number generated by RTRS for IDRO and Customer trades. It may be used on MT515 Modify and MT515 Cancel messages to identify IDRO or Customer trades being modified or canceled.

COMM// – Match Control Number – This qualifier contains the Match Control Number assigned to a pair of sides by RTTM at the time of matching inter-dealer trades. It can be used by participants only on MT515 Modify records submitted post-matching.



While the SWIFT message accommodates both Upper and Lowercase alphanumeric and certain symbols, for RTTM purposes, this field must be populated with an upper case alphanumeric value. It cannot contain symbols or hyphens, except where the reference number is assigned by RTTM. The ABS Turnaround Number in the BASK qualifier has a maximum size of 4c.

e.g., :20C::MAST//PARTREF1

MT515 Field Specifications	
CONFDET	The Mandatory CONFDET (Confirmation Details) block appears only once in a Trade Contract or report. It contains Trade and Confirming Party Details.
98C	<p>Trade Date TRAD// – This mandatory field is used on all messages to specify Trade Date and Trade Time. (The “C” format for this (98) tag indicates a date/time format of “YYYYMMDDHHMMSS”.) SS (seconds) may be entered as “00” if the submitter’s system is not capable of reporting seconds or if trade time to the second is not known. Time of trade is a regulatory field.</p> <p style="text-align: right;"><i>e.g., :98C::TRAD//20030331095510</i></p>
98A 98B	<p>Settlement Date This mandatory field is used on all MT515 messages. For IDROs, enter the Settlement Date of the associated Customer trade. One of the following options must appear for this field: SETT// – This field is used on all messages to specify settlement date. It is required on all regular way inter-dealer and customer trades and New Issue (NI) final money inter-dealer trades. (The “A” format for this tag (98) indicates a date format of “YYYYMMDD”.) SETT//WISS – This field is used on all New Issue trades where the settlement date is not known, and no final money is reflected on the trade. (This is the “B” format of tag (98).)</p> <p style="text-align: right;"><i>e.g., :98A::SETT//20030331</i></p>
90A	<p>Deal Price (“Dollar Price” and “Deal Price - Yield”) This field is reflected on all messages. It contains the Execution Price Type and Price. Only one Tag 90A is allowed per trade report. The price is in SWIFT Standard format, which is left justified, with commas removed, and a comma used instead of a decimal. The following price types may be specified: DEAL//PRCT/ – This qualifier/option is used for dollar prices. For all trades where a trade is executed on price, and no final money is provided in the Settlement Amount field (:19A::SETT//), the dollar price should be reflected. Final Money trades, i.e., trades where a settlement amount is entered, should reflect a value of zero “0,” in this field. Use “0” also for trades in New Issues executed on yield where the dollar price cannot be calculated. DEAL//YIEL/ – This qualifier/option is used for Yield priced trades, and should be used where any trade is executed on yield, and no final money is provided in the Settlement Amount field (:19A::SETT//).</p> <p>While the SWIFT format accommodates 15d characters (with decimal), the NSCC system supports a maximum field size of 13d for the dollar price (DEAL//PRCT). The format must be '9999,99999999'. Yield price (DEAL//YIEL) must not exceed a maximum field size of 8d in the format of '999,9999'.</p> <p style="text-align: right;"><i>e.g., :90A::DEAL//PRCT/99,625</i></p>

MT515 Field Specifications	
94B	<p>Place of Trade – Market of Execution (TRAD) This field is used to specify the Market of Execution for the trade. Modification of this field is not supported on RTTM. If the market of execution changes, participants will need to cancel and resubmit the trade. All reportable trades in municipal securities should populate this field with TRAD/GSCC/OTMU – Over-the-Counter Municipal. <i>e.g., :94B::TRAD/GSCC/OTMU</i></p>
19A	<p>Settlement Amount SETT// – This field is used to specify the Settlement Amount. It is required for all inter-dealer Regular Way trades, but may be omitted on NI trades where the settlement date is not available and final money cannot be calculated. Omit for customer and IDRO trades. The amount is in SWIFT Standard format, which is left justified, with commas removed, and a comma used instead of a decimal. The amount is always preceded by a 3-character ISO currency code (“USD” for NSCC trades).  While the SWIFT format can accommodate a value of 15d (with decimal), the NSCC system supports a field size of 13d. <i>e.g., :19A::SETT//USD1000500,5</i></p>
22H	<p>Trade Type Indicator (BUSE) This field is required on all MT515 messages. There are two allowable values for the BUSE qualifier: BUSE//BUYI – This qualifier/option indicates that the record submitted is a buy from the dealer’s perspective, i.e., that the dealer reporting the trade bought securities. BUSE//SELL – This qualifier/option indicates that the record submitted is a sell from the dealer’s perspective, i.e., that the dealer reporting the trade sold securities. <i>e.g., :22H::BUSE//BUYI</i></p>
22F	<p>Type of Price – Weighted Price PRIC/GSCC/WGTP – regulatory field – This indicator may be used on MT515 Instruct, Cancel or Modify messages to notify the regulator if the price of the trade was based on the weighted average of previous transactions. <i>e.g., :22F::PRIC/GSCC/WGTP</i></p>
22F	<p>Processing Indicator (PROC) This processing indicator enables the participant to indicate to RTTM and RTRS the type of record/ command being submitted on the MT515. PROC/GSCC/INST – This qualifier/option indicates that the MT515 is an INSTRUCT record. PROC/GSCC/CANC – This qualifier/option indicates that the MT515 is a CANCEL record. Inter-dealer trades may be canceled only before they are matched by RTTM. IDROs and customer trades may be canceled on RTRS within 90 days of the initial submission date.</p>

MT515 Field Specifications	
	<p>PROC/GSCC/MDFC – This qualifier/option indicates that the MT515 is a MODIFY record. For inter-dealer trades, modify records may update all matching fields (except CUSIP number and market of execution) only where the trade is not matched or sent to settlement. After this time, only the participant X-ref or regulatory fields may be modified on RTTM inter-dealer trades. Syndicate trades may be modified only on submission date. IDROs and customer trades may be modified on RTRS within two years of trade date.</p> <p>PROC/GSCC/TDDK – This qualifier/option indicates that the MT515 is a DK record pertaining to an inter-dealer trade. DK does not apply to IDRO or customer trades.</p> <p> All of the above record types also apply to Reversals of inter-dealer trades. The Reversal Indicator (:70E::TPRO//GSCC/RVSL) is used to flag Reversal records.</p> <p style="text-align: right;"><i>e.g., :22F::PROC/GSCC/INST</i></p>
22F	<p>Trade Type / Target Indicator (TTCO) This indicator field is used to identify a QSR trade submission as well as trades targeting QSR trades. Allowable options for this field are as follows: TTCO/GSCC/TSQS – This qualifier/option indicates that this is a QSR Trade Submission. This option applies to all QSR submitted MT515 messages. TTCO/GSCC/TTQS – This qualifier/option indicates that the trade is targeting a QSR trade. This option applies to all Target QSR MT515 messages.</p> <p> Option TSQS must have selected a Trade Transaction Type Indicator (:22F::TRTR) of TRLK (Locked-In). Option TTQS must have selected a TRTR of CASH (Bilateral).</p> <p style="text-align: right;"><i>e.g., :22F::TTCO/GSCC/TSQS</i></p>
22H	<p>Payment Indicator (PAYM) This Payment indicator field is mandatory for the MT515 message. All trades (including IDROs) submitted to RTTM and RTRS must provide the following qualifier: PAYM//APMT – This qualifier/option indicates that the trade will settle against payment.</p> <p style="text-align: right;"><i>e.g., :22H::PAYM//APMT</i></p>
36B	<p>Quantity of Securities (CONF) (“Par”)²² This field is mandatory for all MT515 messages. The quantity of the financial instrument is in SWIFT Standard Format, which is left justified, with commas removed, and a comma used instead of a decimal. Valid options are as follows: CONF//FAMT/ – The option ‘FAMT’ indicates the face amount (par), and should be used on all municipal securities trade records. Enter the par</p>

²² Tags 36B, 35B and 70E: TPRO// in the CONFDET block must be placed on the MT515 message following the confirming party subsequences.

MT515 Field Specifications	
	<p>amount in dollars. The SWIFT standard requires the use of a comma instead of a decimal, with no punctuation between groups of three digits. For example, enter par of one million dollars as “1000000,”</p> <p> While the SWIFT format can accommodate a value of 15d in this field, the NSCC system can only accommodate a maximum field size of 10d. e.g., :36B::CONF//FAMT/1000000,</p>
35B	<p>Identification of Security²³</p> <p>The security involved is identified in the US by specifying the ISO country identifier ('/US/'), followed by the CUSIP number. Modification of this field is not supported on RTTM or RTRS.</p> <p> While the SWIFT layout accommodates a format of 4 * 35x, a 9!c (alpha numeric) value should populate the field for the CUSIP. e.g., :35B:/US/78764HAD6</p>
70E	<p>Trade Instruction Processing Narrative (TPRO)²⁴</p> <p>This field is intended to reflect transaction related information not supported by the MT515 layout. It will be used to provide RTTM fields as well as RTRS regulatory fields. Regulatory data, however, is not required by FICC on any MT515 messages that are directed to RTTM. If present, regulatory data will be validated by RTTM for Swift compliance. RTTM will not detect the absence of regulatory data. RTRS will perform presence checks and additional validation of regulatory data.</p> <p>TPRO//GCC – Denotes narrative trade instruction processing information related to RTTM.</p> <p>/DKRS – Should be used on all MT515 DK messages to specify the reason for the DK. The four-character code can be found in Appendix B of this document.</p> <p>/DEST – Should be used to specify the destination of the message as RTTM (01) and/or MSRB (02). This is a repeating field allowing multiple entries. This field should be populated according to the following rules:</p> <p>Specify DEST01 (RTTM) for all MT515 records requiring matching/processing by RTTM.</p> <p>Specify DEST02 (MSRB) to indicate that the record should be forwarded to the MSRB. All records other than DK may reflect a DEST02 value.</p> <p>/ITYP – This field is used by Syndicate Managers and members to specify a Syndicate (ITYPSY) or Target Syndicate (ITYPTS) trade. (It may also be used by the ABS system to specify if a trade is Regular Way (ITYPRW) or New Issue (ITYPNI), but RTRS does <i>not</i> require a Regular Way or New Issue indicator.)</p> <p>/SDAD – The Settlement Date Adjustment subqualifier is used to specify the number of extended settlement days for inter-dealer trades. This field must be included on all extended settlement NI trades, and may</p>

²³ See previous footnote.

²⁴ See previous footnote.

MT515 Field Specifications

optionally be populated for Regular Way (RW) extended settlement trades. This field is not applicable to Syndicate, customer or IDRO trades. /RVSL – This subqualifier is used to indicate that the MT515 record is a Reversal of matched inter-dealer trade. To cancel an inter-dealer trade post-matching, a reversal trade must be entered to offset a previously submitted trade. RTTM does not link a reversal to the trade it is intended to reverse, and treats a reversal as a completely new trade; however, for RTRS regulatory requirements, see RCTL below. All MT515 record types apply to Reversal trades, therefore, this option should be included in all MT515 messages for Reversals. Reversals do not apply to IDROs or customer trades.

/SPXR – regulatory field – The Special Condition Indicator (Special Price Reason Code) is used for trades subject to a deadline other than the 15-minute requirement or executed at a price different from the market price or when the security was traded flat. See section 4.3.2 for description and see Appendix B for a table of Special Condition Indicator values.

/POVR – regulatory field – The Price Override Option is used for resubmission of a previously rejected FINRA regulator trade to indicate that the entered price/yield is valid although it may fall outside the reasonability check. Price override does not apply to trades in municipal securities reported to RTRS.

/RCTL – regulatory field – The Reversal Control Number field should be populated with the Participant X-ref (MAST) or the RTTM Reference Number (i.e., TID (LIST)) or Match Control Number (Match TID (COMM)) of the trade being reversed.

/RGDP – regulatory field – Regulatory Dollar Price is used to report the contractual dollar price on inter-dealer trades. This field must be populated for all inter-dealer trades submitted with final money where the settlement date is known and for all trades effected on the basis of dollar price when the settlement date is not known (“when issued” trades effected on the basis of a dollar price submitted without final money). For trades effected on the basis of yield when the settlement date is not known, this field must be left blank (“when issued” trades effected on the basis of yield submitted without final money). Note that the Dollar Price field will continue only to be used for dealers submitting When Issue or Syndicate Takedown trades with dollar price (Tag:90A:Block/Qualifier:DEAL/Subqualifier/Options/PRCT/Description Deal price) and in these cases dealers must also separately report the contractual dollar price in the Regulatory Dollar Price field.

A continuous string of all applicable subqualifiers (to a maximum of 35 characters per line) follows the TPRO//GSCC qualifier.

e.g.:70E::TPRO//GSCC/DEST02/SPXRM010//YIEL3,5

CONFPTY

The Mandatory Confirming Party Block must be repeated for each party to a trade. Each party specified must be enclosed within a Start Party

MT515 Field Specifications	
	block (:16R:CONFPTY) and End Party block (:16S:CONFPTY). Please note that on every trade there should be two (one buyer and one seller) repeating Confirming Party sequences, and one of these parties will also be the submitter of the MT515 record. It should be noted that certain fields in the CONFDET block (36B, 35B and 70E) must follow the Confirming Party subsequences.
95R	<p>Party BUYR/GSCC/PART – specifies the dealer that is the Buying Party in an inter-dealer or IDRO trade. (The “GSCC” issuer code allows the specification to include the NSCC participant or contra ID, depending on whom is acting as buyer or seller). For customer trades where the customer is the buyer, enter “CUST” and see “Explanation of Selected Fields,” below, where the dealer is the buyer. SELL/GSCC/PART – specifies the dealer that is the Selling Party in an inter-dealer or IDRO trade. For customer trades where the customer is the seller, enter “CUST” and see “Explanation of Selected Fields,” below, where the dealer is the buyer</p> <p style="text-align: center;"> While the SWIFT layout supports a format of 35x for this field, the participant must populate the field with the appropriate qualifier and 4 character Participant ID, for buyer or seller. Customer records will have either the buyer or the seller party with a default value of “CUST”. IDRO records will have the Participant ID on the side whose account is affected and “IDRO” on the other side.</p> <p style="text-align: right;"><i>e.g., :95R::SELL/GSCC/PART1563</i></p>
20C	<p>Processing Reference PROC// – This field must be used on DK messages for inter-dealer trades in the appropriate buyer or seller subsequence to indicate the Contraparty’s External Reference Number of the trade being DKed.</p> <p style="text-align: right;"><i>e.g., :20C::PROC//CONTRAXREF1</i></p>
70C	<p>Participant Contact Narrative (PACO) This field will not be used by RTRS. Within RTTM, it will be used in the appropriate buyer or seller confirming party sequence on MT515 Instructs, Cancels or Modifies submitted to provide information regarding the individual/desk at the contraparty that executed the trade. It should be noted that the trader ID field is for informational purposes only, and will be captured for the purposes of passing the information to the contraparty on MT518 inter-dealer Match Request messages. This field will not be matched or validated, nor will it be a basis for rejection or DK capabilities. (In addition, this narrative field will be used to support the Branch Sequence Number (BRCH), applicable to ABS trades only.) PACO//GSCC – denotes participant contact narrative information specific to RTTM. /TDID – should be used in the appropriate BUYR or SELL confirming party sequence to indicate the following:</p>

MT515 Field Specifications	
	<p>on MT515 Instruct, Cancel or Modify Records, this qualifier should be used by the submitter to indicate the buyer or seller contraparty ID of the trader that executed the trade.</p> <p>on MT515 DK messages, this qualifier should be used to reflect the buying or selling submitter's ID of the trader that executed the trade (as originally submitted by the contraparty).</p> <p>(/BRCH – This qualifier should be used on MT515 messages related to ABS trades to indicate the dealer's Branch Sequence Number.)</p> <p> The NSCC format accommodates a maximum field size of 7 with the Branch in the first 3 positions and the Sequence Number in the last 4 positions.</p> <p style="text-align: right;"><i>e.g., :70C::PACO//GSCC/BRCHXYZ1010</i></p>
70E	<p>Narrative (DECL)</p> <p>This field will be used in each party subsequence to identify the executing/correspondent firm, where applicable.</p> <p>DECL//GSCC – denotes narrative information specific to RTTM.</p> <p>/CORR – For inter-dealer and IDRO trades, the CORR field should be used in both the BUYR and SELL confirming party sequences. In these trades, CORR contains the four character FINRA assigned symbol that identifies the dealer that effected the transaction, unless the COCO field (see below) is used. If the COCO field is populated, CORR contains the four character FINRA assigned symbol of the dealer that is the direct correspondent of the participant. For customer trades, CORR should be used in the BUYR or SELL confirming party sequence to indicate the four character FINRA symbol of the dealer that effected the trade.</p> <p>/COCO – regulatory field – Reserved for future use. Omit for inter-dealer and customer trades. Omit for contra side of IDRO reports.</p> <p><i>A continuous string of all applicable subqualifiers (to a maximum of 35 characters per line) follows the DECL//GSCC qualifier,</i></p> <p style="text-align: right;"><i>e.g., 70E::DECL//GSCC/CORRATGNCOCOAABB</i></p>
22F	<p>Trading Capacity (TRCA)</p> <p>This field will be used to identify the dealer's trading capacity as Principal or Agent on all trades. This field should be populated as follows:</p> <p>A bilateral trade submitter should populate its own capacity in the appropriate buyer or seller block – regulatory field.</p> <p>A QSR submitter should populate the appropriate buyer or seller block to reflect its own trading capacity, and, in addition, the contraparty trading capacity – regulatory field.</p> <p>A syndicate manager should populate both its own as well as the contraparty's capacity in the appropriate buyer or seller block –regulatory field.</p>

MT515 Field Specifications	
	<p>An IDRO submitter should populate its own capacity as “Principal” in the appropriate buyer or seller block and should submit the capacity of the correspondent as “Agent” in the contraparty block – regulatory field. A customer trade submitter should populate its own capacity in the appropriate buyer or seller block – regulatory field.</p> <p>Valid options for this field are:</p> <p>TRCA//AGEN – denotes that the party (and/or contraparty) is acting as the agent for a customer.</p> <p>TRCA//PRIN – denotes that the party (and/or contraparty) is acting as Principal.</p> <p style="text-align: right;"><i>e.g., :22F::TRCA//AGEN</i></p>
SETDET	<p>This Optional block is necessary only when a Settlement Indicator, a Commission/Concession AMT subsequence, or an Accrued Interest AMT subsequence is specified on the trade.</p>
22F	<p>Settlement Indicator (SETR)</p> <p>This field is SWIFT mandatory for the block, and must be included on all MT515 messages that contain a SETDET block. The available options are as follows:</p> <p>SETR//RPTO – This option must be selected if the trade is not a special trade (i.e., if the trade does not reflect one of the following options for this field).</p> <p>SETR/GSCC/STRD – Indicates that the trade is a Special Trade and will settle Trade for Trade.</p> <p>SETR/GSCC/CPRO – Indicates that the trade is Comparison Only and will not go to Settlement.</p> <p> See the FICC Specification, Appendix H for a mapping of the above Settlement Type Indicators to those used on batch input/output.</p> <p style="text-align: right;"><i>e.g., :22F::SETR//RPTO or :22F::SETR/GSCC/STRD</i></p>
AMT	<p>This Optional Repeating Block is only necessary to support the inclusion of Commission, Concession and / or Accrued Interest. This block should always be included within the Settlement Details (SETDET) block.</p>

MT515 Field Specifications	
19A	<p>Commission Amount</p> <p>This field will be used to support the submission of commissions or concessions, which are specified as an Amount per Trade (rather than amount per hundred). Valid options for this field are:</p> <p>SPCN//USD – This field specifies the special concession amount on NI trades. Concessions will appear only on trades submitted with a yield price (:90A::DEAL//YIEL/). This field is signed to allow positive/negative entries.</p> <p>EXEC//USD – regulatory field – This field specifies the executing broker commission on customer agency trades. Enter commission as a positive amount on both Buys and Sells.</p> <p>Example: A commission/concession rate of .125 per 100 PAR equals 1.25 dollars per 1,000 PAR. The commission/concession amount for a Face Value of 10,000 = 1.25 * 10 or 12.5 dollars. This amount will be populated as USD12,5.</p> <p> The value in this field is an Amount per Trade. The commission amount field is in SWIFT Standard Format, which is left justified, with commas removed, and a comma used in lieu of a decimal. The amount must be preceded by a 3-character ISO currency code.</p> <p style="text-align: right;"><i>e.g., :19A::SPCN//USDN12,5</i></p>
19A	<p>Accrued Interest</p> <p>This field should be populated on all MT515 messages for final money trades.</p> <p>ACRU//USD – This field specifies the Accrued Interest amount required on all MT515 submissions for RW inter-dealer trades, and should be populated where a trade should settle with Accrued Interest. That is, whenever Accrued Interest can be calculated on a final money trade, it should be reported. If Accrued Interest is calculated as zero or cannot be calculated, report zero “0”.</p> <p> While Swift format allows for a field size of 15d, the NSCC system can support a maximum size of 10d.</p> <p style="text-align: right;"><i>e.g., :19A::ACRU//USD1040,</i></p>
OTHRPTY	This Optional block is only necessary if the originator of the message is not the same as the Sender of the message.
95Q	<p>Originator of Message (MEOR)</p> <p>MEOR// – regulatory field – This field specifies the originator of the message if NOT the sender identified in the header of the message.</p> <p style="text-align: right;"><i>e.g., :95Q::MEOR//ORGN</i></p>

4.2.2 Analysis of MT515 Fields by Trade Type

The following table shows, for each MT515 field and for inter-dealer, IDRO and customer trades, whether the field is mandatory, should be omitted or should be used when applicable to the trade.

Field Name	Inter-Dealer	Inter-dealer Regulatory-only	Customer
Password	Mandatory	Mandatory	Mandatory
Sender	Mandatory	Mandatory	Mandatory
Message type	Mandatory	Mandatory	Mandatory
Receiver	Mandatory	Mandatory	Mandatory
Sender's reference for this msg	Mandatory	Mandatory	Mandatory
Message function = new or cancel	Mandatory	Mandatory	Mandatory
Preparation date/time	Mandatory	Mandatory	Mandatory
Trade Transaction Type indicator	Mandatory: "CASH" for bilateral or syndicate target or QSR target trades; "TRDC" for syndicate (demand) trades; "TRLK" for locked-in (QSR) trades.	Mandatory: "TRLK"	Mandatory: "CASH"
Master reference number (X-REF)	Mandatory for INSTRUCT. For DK message, must be "NONREF". For use in Cancel and Modify, see RTTM Assigned Reference (TID). (On inter-dealer trades, this is the participant's reference number.)	Mandatory for INSTRUCT. For use in Cancel and Modify, see RTTM Assigned Reference. (On IDRO trades, this is the introducing dealer's reference number.)	Mandatory for INSTRUCT. For use in Cancel and Modify, see RTTM Assigned Reference. (On customer trades, this is the introducing dealer's reference number.)
Previous X-REF	May use on Modify message to change X-REF (otherwise use TID). Do not use on Instruct or DK.	May use on Modify or Cancel to change X-REF (otherwise use Regulator Control Number)	May use on Modify or Cancel to change X-REF (otherwise use Regulator Control Number)

Field Name	Inter-Dealer	Inter-dealer Regulatory-only	Customer
RTTM assigned reference (TID)	May use for pre-match Cancel and Modify (otherwise use X-REF), or post-match Modify (otherwise use Previous X-REF or Match Control No.)	Omit	Omit
Regulator control number	Omit	May be used on modify or cancel messages (otherwise, use X-REF)	May be used on modify or cancel messages (otherwise, use X-REF)
Match control number	May be used on modify messages submitted post-matching (otherwise, use X-REF)	Omit	Omit
Trade date and time	Mandatory	Mandatory	Mandatory
Time of trade (contained in Trade Date field)	Mandatory	Mandatory	Mandatory
Settlement date	Mandatory for regular way and for when-issued with final money	Mandatory (same as settlement date of associated customer trade).	Mandatory
Deal price as dollar price (DEAL//PRCT)	Use to report deal price as dollar price. Note: Must report dollar price, yield or settlement amount on New Issue. Trades with settlement amount (either NI or RW) should have DEAL//PRCT as "0,"	Use to report deal price as dollar price. Note: Must report dollar price or yield for when-issued trades.	Use to report deal price as dollar price. Note: Must report dollar price or yield for when-issued trades.
Deal price as yield (DEAL//YIEL)	Use to report deal price as yield. Note: Must report dollar price, yield or settlement amount on New Issue trades.	Use only when security is in when-issued status and is traded on basis of yield	Use only when security is in when-issued status and is traded on basis of yield
Market of execution	Mandatory: "OTMU"	Mandatory: "OTMU"	Mandatory: "OTMU"
Settlement amount	Use for regular way trades and for NI trades reported with final money	Omit	Omit

Field Name	Inter-Dealer	Inter-dealer Regulatory-only	Customer
Buy/sell indicator	Mandatory	Mandatory	Mandatory
Type of price/weighted price	Use when applicable	Use when applicable	Use when applicable
MT515 record type: Inst, Canc, Mod, or DK	Mandatory	Mandatory (cannot be DK)	Mandatory (cannot be DK)
Trade type: QSR indicator	Use for QSR (locked-in) or target QSR trade	Omit	Omit
Against payment indicator	Mandatory: "APMT"	Mandatory: "APMT"	Mandatory: "APMT"
Participant (buyer AND seller)	Mandatory	Mandatory	Mandatory
Buyer (contra) X-ref AND Seller (contra) X-ref	Use in DK message to indicate the contraparty's external reference number of the trade being DK'd	Omit	Omit
Correspondent (buyer AND seller)	Mandatory	Mandatory	Mandatory to identify dealer that effected the trade; omit on customer's side
Correspondent of correspondent (<i>reserved for future use</i>)	Omit	Omit	Omit
Contraparty correspondent of correspondent (<i>reserved for future use</i>)	Omit	Omit	Omit
Capacity indicator - acting as agent/ principal	Mandatory for dealer reporting the trade; use also for contraparty in unilateral submission	Mandatory	Mandatory on dealer side; omit on customer side
Quantity (par)	Mandatory	Mandatory	Mandatory
CUSIP	Mandatory	Mandatory	Mandatory
DK reason	Use for DK	Omit	Omit
Destination	Mandatory. Use "RTTM" only (rare); or "MSRB" only; or "RTTM" and "MSRB"	Mandatory: "MSRB"	Mandatory: "MSRB"
Syndicate trade indicator	Use for syndicate or targeted syndicate trade	Use for syndicate or targeted syndicate trade	Omit

Field Name	Inter-Dealer	Inter-dealer Regulatory-only	Customer
Trade reversal indicator	Use when applicable	Omit	Omit
Special condition indicator	Use when applicable	Use when applicable	Use when applicable
Reversal control number	Use on reversal. Enter X-REF or RTTM-assigned TID or Match Control Number (COMM).	Omit	Omit
Yield (TPRO//YIEL)	Omit	Omit	Omit
Settlement Indicator - Reporting only	Mandatory	Mandatory	Mandatory
Concession	Use on new-issue trades when applicable (yield trades only)	Omit	Omit
Commission	Omit	Omit	Use for agency trades. Provide dollar amount for the trade on MT515 message; provide rate for Web screen. See Section 4.3.
Accrued interest	Use for final money trades	Omit	Omit
Originator of message	Mandatory on Web input. Omit on message.	Mandatory	Mandatory
Settlement date adjustment	Use when applicable (for when-issued if not syndicate trade)	Omit	Omit
Settlement type indicator (Special Trade)	Use when applicable	Use when applicable	Use when applicable
Regulatory Dollar Price (TPRO//RGDP)	Mandatory for trades submitted with final money. Mandatory for trades effected on the basis of dollar price when settlement date is not known and submitted without final money. Omit on when-issued trades effected	Omit	Omit

Field Name	Inter-Dealer	Inter-dealer Regulatory-only	Customer
	on the basis of yield when settlement date is not known and submitted without final money.		
THE FOLLOWING FIELDS ARE NOT USED IN REPORTING MUNICIPAL SECURITIES TRADES TO THE MSRB			
Participant contact narrative, buyer contra trader ID, branch sequence number, price override option, order time, broker reference number, ABS turnaround number, trade type/target indicator = ABS trade and Target ABS trade.			

4.3 Explanation of Selected Fields

This section adds additional comments regarding fields used differently or more specifically in the MT515 for RTRS regulatory reporting than in RTTM matching. Fields where there are no differences are not listed.

4.3.1 Dollar Price, Yield, Accrued Interest and Settlement Amount

How these fields are reported depends upon the type of trade, as shown in the table below.

Trade Type	DEAL (Deal Price)	TPRO YIEL (Yield)	ACRU (Accrued Interest)	SETT (Settlement Amount)
Inter-dealer New Issue, Settlement Date unknown	Report dollar price as DEAL// PRCT or report yield as DEAL// YIEL	Omit	Omit	Omit
Inter-dealer New Issue, first settlement date is known	Report PRCT or YIEL, unless Settlement Amount is reported	Omit	Report, if Settlement Amount is reported	Report, unless Deal Price is reported
Inter-dealer Regular Way	Omit	Omit	Report, if bond pays interest	Report
Customer or IDRO, When Issued	Report dollar price as DEAL// PRCT or report	Omit	Omit	Omit

Trade Type	DEAL (Deal Price)	TPRO YIEL (Yield)	ACRU (Accrued Interest)	SETT (Settlement Amount)
	yield as DEAL// YIEL			
Customer or IDRO Regular Way	Report dollar price as DEAL// PRCT	Omit	Omit	Omit

4.3.2 Other Fields

Sender

Inter-dealer trades: Enter the NSCC participant number of the participant submitting the message.

Customer and IDRO trades: Enter valid NSCC participant number.

See explanation of Originator field, below, for a table showing the inter-relationship of Sender and Originator.

Header Fields: Other

Rules for the Receiver field were described above in Section 1.4.3. Rules for the other header fields are stated in the FICC Specification.

Trade Transaction Type Indicator

Use “CASH” for two-sided (bilateral) and customer trades. Use “TRLK” (locked-in) for Qualified Special Representative (QSR) and inter-dealer regulatory only (IDRO) trades. Use “TRDC” for Syndicate (demand) trades.



As stated in section 1.6, code “TRTR/GSCC/TRDC” is a separate and distinct indicator from the “List Offering Price/ Takedown Transaction” Special Condition Indicator (code “SPXR”).

Reference

MAST – Master Reference Number (also known as External Reference Number, or X-REF). For inter-dealer trades, populate this field with the primary reference number that the participant will use to track trades in the RTTM and RTRS systems. Each of the *participant’s* (clearing broker’s) *inter-dealer trades* stored in RTTM must have a unique X-REF. For IDROs and customer trades, populate this field with the primary reference number that the effecting dealer will use to track trades in RTRS. Each of the *effecting dealer’s* customer trades or IDROs must have an X-REF that is unique for the effecting dealer. This means that a clearing dealer may use the same X-REF for two of its correspondents. Example: Participant 0123 submits effecting dealer A’s trade number 001 and also submits effecting dealer B’s trade number 001.

MSRB requires dealers not to re-use an X-REF for a three year period. Although re-use of an X-REF on an inter-dealer trade will not prevent the trade from being matched, RTRS will send an error message requiring the dealer to change the X-REF (using the TID or Regulator Control Number to identify the trade being changed). This rule is required because trades are kept on-line in RTRS for multiple years.

PREV – Previous Reference Number. Use on either Modify or Cancel records. On Modify records, it is used *only* to change the X-REF. Populate this field with the previous X-REF, that is, the X-REF used before the modification. On Cancel records, always populate this field with “NOREF”. Do not use this field with Instruct or DK records.

LIST – RTTM Reference Number (TID). This field can be used by the dealer as an alternative to the other reference fields when submitting a Modify or Cancel of an inter-dealer trade.

TRRF – Regulator Control Number. Like LIST, this field can be used by the dealer as an alternative to the other reference fields when submitting a Modify or Cancel of a customer or IDRO trade.

COMM – Match Control Number. This field can be used only on Modify records submitted post-matching for inter-dealer trades. Populate with the Match Control Number previously assigned by RTTM.

Processing Indicator

Enter the following values:

INST (Instruct) – Enter an Instruct when first reporting the trade, or when reporting a trade after its earlier report has been canceled or reversed. In other words, use INST only once while a trade identified by a unique Master Reference Number (MAST or X-REF) is stored on RTTM or RTRS. RTRS will accept an Instruct for a customer, IDRO or interdealer trade with a trade date of January 2, 2002 or later, although it will mark such a submission as late if not submitted by the deadline.

CANC (Cancel) – Enter a Cancel for an inter-dealer trade only before a match has been made by RTTM. Enter a Cancel for a customer trade or IDRO up to 24 months after trade date.

MDFC (Modify) – Enter a Modify for an inter-dealer trade to modify any field except CUSIP before a match has been made by RTTM. Enter a Modify for an inter-dealer trade to modify match data (except CUSIP number, market of execution) until the match is achieved (but, for syndicate or target syndicate submissions, only on submission date). For an interdealer trade, enter modifications of the X-REF or regulatory fields after a match has been made. Enter a Modify for a customer trade or IDRO up to 24 months after trade date.

TDDK (DK) – Enter a DK for an inter-dealer trade before a match has been made. Do not enter for a customer or IDRO trade.

Par (Quantity as Face Amount)

Enter the par amount of the transaction. For customer and IDRO transactions, valid amounts include those that are not multiples of 1,000 (e.g., 826,186.23). For inter-dealer transactions, amounts must be integers (whole dollars) and:

Submissions before January 26, 2007 must be multiples of 1,000

Submissions on or after January 26, 2007 may be less than 1,000. Submissions that are 1,000 or more must be multiples of 1,000.²⁵

Trade Instruction Processing Narrative

This field contains several items for regulatory reporting.

DEST – Destination. An overview of Destination was given in Sections 1.4 and 1.6.

Use one or several Destination codes to direct messages as follows:

To RTTM whenever a municipal securities inter-dealer trade is reported or changed, if the trade is stored in RTTM. (see Section 1.4.4 for purge rules).

To RTRS whenever any municipal securities trade is reported or changed. To RTTM in addition to RTRS for a customer or IDRO trade which the dealer wishes to store in RTTM.

Section 1 described how messages can be distinguished, using Destination, Receiver, and Trade Indicator.

ITYP – Issue Type. Use to indicate a Syndicate Takedown (ITYPSY) or Target Syndicate (ITYPTS) trade. A Target Syndicate message allows a syndicate member to correct regulatory data in a trade reported by the syndicate manager, or to cause the syndicate trade to match before the end of day of submission. Do not use this field to indicate whether a trade is New Issue or Regular Way. Do not use this field to indicate that a trade is a “List Offering Price/ Takedown Transaction.”

SPXR – Special Condition Indicator. This is a dual purpose code that is used to indicate: (a) that the trade is eligible for an extended reporting deadline (i.e., a reporting deadline other than the 15-minute requirement), (b) that a trade is subject to a special condition, as described below and/or (c) that a customer trade did not include a mark-up, mark-down or commission (non-transaction-based compensation arrangements or NTBC) or an inter-dealer transaction executed with or using the services of an alternative trading system (ATS) with Form ATS on file with the SEC. A list of ATSs with Form ATS on file with the SEC is available on the SEC’s website at www.sec.gov/foia/docs/atstlist.htm. Since these conditions may apply independently of one another, a different position within the four-character code is used to indicate each condition.

²⁵ Effective January 26, 2007, RTTM accepts par amounts less than 1,000 in municipal securities. An inter-dealer transaction par amount that is greater than 1,000 and is not a multiple of 1,000 must be submitted in two transactions: one that is a multiple of 1,000 and one that is less than 1,000. For example, a par of 100,700 must be submitted as one transaction of 100,000 and one of 700. See RTTM Important Notice A6329/P&S 5899 dated November 2, 2006 and MSRB Notice 2006-34 dated December 5, 2006.

Format. The Special Condition Indicator is formatted as Mccc, where the first character is “M” (municipal) and the next three characters “c” are integers that indicate the conditions above. If a condition applies only for the second character and not the third character or vice versa, use “0” for the character without an applicable condition

See Appendix B.2 for all values of this code.

A List Offering Price/Takedown Transaction in a short-term instrument (*i.e.*, a transaction that qualifies for both “Mc2c” and “Mc3c” as shown below) must be coded using the List Offering Price/ Takedown Transaction indicator (“Mc2c”) rather than the Short-Term Instrument Special Condition Indicator (“Mc3c”).

Exceptions to the 15-Minute Reporting Deadline. If the trade qualifies for one of the following exceptions to the 15-minute reporting requirement, indicate the deadline using the **third character**. (Business rules for reporting deadlines are described above, Section 1.2.2.)

Mc2c: End-of-day deadline applies – List Offering Price/Takedown Transaction as defined in Section 1.2.2. Example: M02c. Note: This indicator is mandatory for all List Offering Price/Takedown Transactions, even if they are reported within 15 minutes of the trade time.

Mc3c: End-of-day deadline applies – Trade in a short-term instrument under nine months. Examples: M030, M131.

Inter-Dealer Transactions Reported Late. The following conditions can be indicated using the **third character**.

Mc4c: Inter-Dealer Ineligible on Trade Date – Certain inter-dealer transactions are not able to be submitted to RTTM on trade date or with the accurate trade date either because all information necessary for comparison is not available or because the trade date is not a “valid” trade date in RTTM. Examples: M040, M140.

The following trading scenarios require use of this Special Condition Indicator:

- a) VRDO Ineligible on Trade Date – Inter-dealer secondary market transactions may be effected in variable rate demand obligations (VRDOs) in which the interest rate reset date occurs between trade date and the time of settlement. Since dealers in this situation cannot calculate accrued interest or final money on trade date, they cannot process the trade through RTTM until the interest rate reset has occurred. Dealers are required to report such trades by the end of the day on which the interest rate reset occurs and to include the original trade date and time;

- b) Invalid RTTM Trade Date – Dealers sometimes execute inter-dealer transactions on weekends and on certain holidays that are not valid RTTM trade dates and that therefore cannot be reported to RTRS using the actual trade date. Dealers are required to report such trades to RTTM no later than fifteen minutes after the start of the next RTRS Business Day and to include a trade date and time that represents the next earliest “valid” values that can be submitted.²⁶

Mc5c: Resubmission of an RTTM Cancel – Uncompared inter-dealer trades are cancelled by RTTM on T+2 and the dealer originally submitting the trade must resubmit the transaction in a second attempt to obtain comparison with the contra-party. The dealer that originally submitted information to RTTM must use this indicator when resubmitting to avoid being scored late; however, the dealer may only use this indicator if it resubmits identical information about the transaction by the end of the RTRS Business Day following the day the trade was cancelled. Examples: M050, M150.

Flat Trades. If a security is traded on terms that do not include accrued interest (“traded flat”), indicate this condition using the **second character** of the Special Condition Indicator. If a security is traded with terms that do include accrued interest, but the amount of computed accrued interest is zero, such a transaction is not considered to have “traded flat.” For example, trade reports in zero-coupon bonds should not include this Special Condition Indicator.

M1cc: Bond was traded flat. This indicator is mandatory on transactions effected on terms that do not include accrued interest. Examples: M100, M130.

Away From Market Trades. If a trade was done with a special condition as described below, indicate the condition using the **second character** of the Special Condition Indicator.

M9cc: Away from market (other reason). Transactions reported with this indicator receive an end-of-day exception from the 15-minute reporting deadline. Examples: M900, M930.

Use of this indicator is mandatory for trade reports in the specific trading scenarios listed below or if the transaction price differs substantially from the market price for multiple reasons or for a reason not covered by another Special Condition Indicator.

The following specific trading scenarios require use of this Special Condition Indicator:

²⁶ The MSRB has provided an example of a trade date and time that would be included on a trade report using this procedure. See “Reporting of Inter-Dealer Transactions that Occur Outside of RTRS Business Day Hours or on Invalid RTTM Trade Dates,” MSRB Notice 2007-12 (March 23, 2007).

a. Customer Repurchase Agreement Transactions – Some dealers have programs allowing customers to finance municipal securities positions with repurchase agreements (“repos”). Typically, a bona fide repo consists of two transactions whereby a dealer will sell securities to a customer and agree to repurchase the securities on a future date at a pre-determined price that will produce an agreed-upon rate of return. Both the sale and the purchase transactions resulting from a repurchase agreement are required to include this Special Condition Indicator.

b. UIT-Related Transactions – Dealers sponsoring Unit Investment Trust (“UIT”) or similar programs sometimes purchase securities through several transactions and deposit such securities into an “accumulation” account. After the accumulation account contains the necessary securities for the UIT, the dealer transfers the securities from the accumulation account into the UIT. This transfer of securities from the accumulation account into the UIT is required to be reported with this Special Condition Indicator.

c. TOB-Related Transactions – Dealers sponsoring tender option bond programs (“TOB Programs”) for customers sometimes transfer securities previously sold to a customer into a derivative trust from which derivative products are created. If the customer sells the securities held in the derivative trust, the trust is liquidated, and the securities are reconstituted from the derivative products and transferred back to the customer. Trade reports of the transfers of securities into the derivative trust and the transfer of securities back to the customer upon liquidation of the trust are required to include this Special Condition Indicator.

RCTL – Reversal Control Number. In a Reversal Instruction, provide the reference number of the trade being reversed. Provide Dealer’s Reference Number (X-REF) or Match Control Number (COMM).

Alternative Trading System (ATS) Transactions. If an inter-dealer trade was executed with or using the services of an alternative trading system with Form ATS on file with the SEC, indicate this condition using the fourth character of the Special Condition Indicator. A list of ATSS with Form ATS on file with the SEC is available on the SEC’s website at www.sec.gov/foia/docs/atstlist.htm.

Mcc1: Alternative Trading System (ATS) Transaction. This indicator is mandatory on trades executed with or using the services of an alternative trading system (ATS) with Form ATS on file with the SEC. Examples: M001, M131, M941.

Customer Trades Involving Non-Transaction-Based Compensation (NTBC) Arrangements. If a customer trade did not include a mark-up, mark-down or commission, indicate this condition using the fourth character of the Special Condition Indicator.

Mcc2: Non-transaction-based compensation (NTBC) arrangement transaction. This indicator is mandatory on customer trades that do not include a mark-up, mark-down or commission. Examples: M002, M132.

YIEL – Yield. Omit this field for all trades. Use DEAL//YIEL to report trades effected on a yield basis.

Omit TRPO//YIEL when reporting transactions in securities that do not have a fixed rate of interest. Examples of such securities are variable rate securities, collateralized mortgage obligations, and securities that prepay principal. Omit TPRO//YIEL when reporting trades in defaulted securities or in securities traded on a discounted basis.

Customer trades before the first settlement date is determined, in securities that are in when-issued status: For these trades, the dealer should report either the trade's dollar price or the yield, but may omit the other parameter (since settlement date is needed to calculate price from yield, or yield from price). If the trade was effected on dollar price, report DEAL//PRCT and omit TPRO//YIEL. If the trade was effected on yield, report DEAL//YIEL and omit TPRO//YIEL.

When the initial settlement date is determined, the dealer should not submit a Modify record to report the dollar price or yield to the MSRB if it has already reported the trade accurately in other respects. (RTRS will recalculate the trade as necessary.)

Note that when a new issue trade is initially reported, if the settlement date is known, the dealer must report the price.

Party

Inter-dealer trade: On each side of an inter-dealer trade, enter the Participant Number of the clearing broker (NSCC participant) that was a party to the trade. NOTE: For IDROs, the Participant Number will be used on the side of the trade whose account changes, and "IDRO" on the other side.

Customer trade: On the customer's side of a customer trade, enter the literal "CUST". On the dealer's side the Party value is used for processing purposes and does not indicate that an organization was a party to the trade. The Party value on the dealer's side must contain a valid NSCC participant number.

Trading Capacity

Identify the dealer's trading capacity as Principal or Agent in all trades (See Section 1.3.1.). For bilateral inter-dealer trades and customer trades, the submitter enters the capacity only on its own side. For Demand (Syndicate Takedown), IDRO and QSR trades, enter the capacity on both sides. An IDRO submitter should populate its own capacity as Principal on the appropriate buyer or seller side and the capacity of the correspondent as Agent.

Commission Amount

EXEC – Executing Broker Commission. Use on customer agency trades to specify the commission, if any. Use “0” if commission was zero. Specify the amount per trade (not rate). Enter the amount as a positive number on both Buys and Sells.

Relationship of dollar price, yield and commission in customer agency trades.

Report the dollar price at which the trade was effected. Do not include the effect of any commission in the dollar price value. Commission is reported separately.

As stated above, report the yield at which the trade was effected, in per cent. The yield value reported is the same "net" yield that is reported on customer confirmations. Therefore, it should include the effect of any commission (see MSRB rule G-15(a)). Rule G-15(a) in most cases requires the yield to be computed to the lower of call or nominal maturity date.

Report the total amount of commission, e.g., \$50.00. Note that RTRS will convert the commission amount to the same units as dollar price and will either (a) add the commission to the dollar price to compute the net dollar price in a sale to a customer, or (b) subtract the commission from the dollar price to compute the net dollar price on a purchase from a customer. For example, if a dealer charges \$12.50 commission on a sale of \$10,000 par at a price of \$99.50 (exclusive of commission), report a commission of \$12.50 and, separately, a dollar price of \$99.50. RTRS will convert the commission to 0.125 and add this to 99.50, giving net price of \$99.625. RTRS disseminates the net price to the customer, \$99.625. RTRS does not disseminate the commission separately.

If the trade was effected on an agency basis, report the commission, even if it is zero. If the trade was a principal trade, omit the commission field or report it as zero. You may not report a non-zero commission for a principal trade.

Accrued Interest

Enter the Accrued Interest amount on inter-dealer regular way trades which should settle with Accrued Interest. That is, whenever Accrued Interest can be calculated on a final money trade, it should be reported. If Accrued Interest is calculated as zero or cannot be calculated, report zero “0,”.

Originator of Message

The MSRB assigns a Submitter Identifier to every dealer or service bureau that submits data to RTRS, for use in the Originator field. Inter-dealer trades: If submitted by a participant, omit. If submitted by a service bureau for a participant, enter Submitter Identifier of the Service Bureau.

Customer and IDRO trades: Enter the Submitter Identifier of the participant, non-participant, or service bureau that is submitting the trade.

Relation of Sender and Originator

The relation of these fields is shown in the table below.

Trade Type	Who is Submitting	Sender	Originator (MEOR)
Inter-dealer	Participant	Participant number	Blank
Inter-dealer	Service bureau for Participant	Participant number	Submitter ID of service bureau
Customer or IDRO	Dealer submitting for itself, or service bureau submitting for participant	Participant number	Submitter ID of participant or service bureau

4.4 MT509 Message

4.4.1 MT509 Message Specification

This section provides the detailed specification for the MT509 message sent by RTRS. See the FICC specification for MT509 messages sent by RTTM on inter-dealer trades. As described in the MT509 Overview in this document, the RTRS MT509 indicates that a trade message is either affirmed or not affirmed.

4.4.2 MT509 General Format

M/O	Tag	Block/Qualifier	Subqualifier/Options	Field Description	Data Field Format
				Message Header	
				Password	12!c
				Sender	8!c
				Message Type	3!n/3!n/4!c
				Receiver	8!c
M	:16R:	GENL		Block Start	
M	:20C:	:SEME//		Sender's Message Reference	16x
M	:23G:	INST		Function of the Message - status of instruct, or	4!c
		CAST		status of cancel	
O	:98C:	:PREP//		Preparation Date/Time	8!n6!n
M	:16R:	LINK		Repeat Block Start	
M	:20C:	:MAST//		Dealer External Reference Number	16x

M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:PREV//		Previous External Reference Number	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:RELA//		Sender's Message Reference Number	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:LIST//		FICC TID	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:COMM//		Match Control Number	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:TRRF//		MSRB Regulator Control Number	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	LINK		Repeat Block Start	
O	:20C:	:INDX//	DEST02	Regulator-Only Input Indicator	16x
M	:16S:	LINK		Repeat Block End	
M	:16R:	STAT		Repeat Block Start	
M	:25D:	:AFFM/	/AFFI	Trade processed without error	4!c
			/NAFI	Trade processing resulted in exception	
M	:16R:	REAS		Optional Repeat Block Start	
M	:24B:	:NAFI/	GSCC/	Error Code (see table of error codes)	4!c
O	:70D:	:REAS/	/GSCC		(6*35x)
			/RSTA	Regulatory Status Code (See Part IV)	4!c
			/ETXT	Error Text	80x
M	:16S:	REAS		Repeat Block End	
M	:16S:	STAT		Repeat Block End	
M	:16S:	GENL		Block End	

MT509 Field Specifications

Message Header	Each Message must contain a message header. All header fields are mandatory fixed format with trailing blanks, where required.	
Password	12!c	Password fields will be blank filled on MT509 messages.
Sender	8!c	NSCCTRRS (NSCC Trade Registration and Reconciliation System) will be the sender of MT509 messages originating in RTTM. MSRBTRRS will be the sender of MT509 messages originating in RTRS.
Message Type	3!n/3!n/4!c	The first three characters indicate to the recipient the message type (509); the second three positions reflect the version of the message interface (currently always 000). The last four characters indicate the issuer code to be used in the message ("GSCC").
Receiver	8!c	Participant ID
GENL	This mandatory block provides general information regarding the message. It appears only once in a Status Message.	
20C	<p>Sender Message Reference SEME// – This mandatory field contains the sender's (RTRS) message reference number. It is used on all messages sent by RTRS and will contain a unique number to unambiguously identify each message. (This is a communications message number, not a trade number.)</p> <p> While the SWIFT message accommodates both Upper and Lowercase alphanumeric and certain symbols, for RTRS purposes, this field will be populated with an upper case alphanumeric value. It will not contain symbols or hyphens.</p> <p>e.g., :20C::SEME//RTRSCOMREF1</p>	
23G	<p>Function of the Message This mandatory field is used on all messages to identify the function of the message. It will either be the status of an Instruct, Modify, or DK (INST), or regarding the submission of a cancellation of a previous message (CAST). INST – This qualifier will be used for trade status messages usually referring to Instructs or Modifies. When referring to RTTM inter-dealer trades it will also be reflected on all MT509 reject messages where the MT515 was a DK or was rejected for being non-SWIFT compliant. CAST – This qualifier will be used on messages referring to cancellations. e.g., :23G:INST</p>	
98C	<p>Preparation Date and Time PREP// – This field will be reflected on all messages to indicate the date and time the message was prepared by RTRS</p> <p> The "C" format for this (98) tag indicates a date/time format of "YYYYMMDDHHMMSS".</p> <p>e.g., :98C::PREP//20030331101510</p>	

LINK	<p>The LINK Block will be repeated for as many reference qualifiers as need to be included in a Trade Status Message. Each subsequence contains reference numbers to identify the trade or record for which the status is being reported. Each reference number will be enclosed within a Start Link Block (:16R:LINK) and End Link Block (:16S:LINK). All LINK repeating subsequences are within the GENL Block.</p>
20C	<p>Reference As indicated above, each reference number will be enclosed in a LINK Start and End Block.</p> <p>MAST// – Master Reference Number – This qualifier contains the Dealer’s Reference Number for the trade (External Reference Number). The MAST qualifier will be present on all MT509’s except where an MT515 message was rejected for being non-SWIFT compliant, and on MT509’s referring to MT515 DK records submitted.</p> <p>PREV// – Previous Reference Number – This qualifier is used only on records where the External Reference Number has been modified by the dealer and will contain the dealer’s previous External Reference Number.</p> <p>RELA// – MT515 Sender’s Message Reference Number – This qualifier will contain the Sender’s Message Reference Number (20C::SEME//) from the MT515 submitted by the dealer. This may be the only 20C qualifier in the LINK block where an MT509 Reject message is being created for a non-SWIFT compliant MT515.</p> <p>LIST// – RTTM Assigned Reference Number – This qualifier will contain RTTM’s assigned reference number (TID).</p> <p>COMM// – Match Control Number – This qualifier will contain the Match Control Number assigned by RTTM upon matching. It will be included on any MT509 message sent post-match. Not used for customer or IDRO trades.</p> <p>TRRF// – MSRB Regulatory Control Number – This field reflects the control number assigned to a customer or IDRO transaction by the MSRB. Not used for inter-dealer trades.</p> <p>INDX//DEST02 – Regulator-only Input Indicator – Indicates whether the MT515 to which the MT509 is responding was submitted to RTRS only (DEST02). If the MT515 was not directed to RTTM (DEST01) then this field is populated with DEST02; otherwise this field is absent.</p> <p> While the SWIFT message accommodates both Upper and Lower case alphanumeric and certain symbols, for RTRS purposes, this field will be populated with an upper case alphanumeric value. It will not contain symbols or hyphens except where the reference number has been assigned by RTRS.</p> <p>e.g., :20C::MAST//PARTREF1</p>
STATUS	<p>The Status Block will appear on every MT509 message and will notify the dealer of the type of MT509 record being sent, as well as the status of the trade, or record, that was submitted to RTRS.</p>

25D	<p>Status Code The Status code indicates the record type or type of status message being sent by RTRS. There are two message types: AFFM//AFFI – Affirmed – This qualifier/option is used to indicate that an instruction message has been processed without finding errors. AFFM//NAFI – Not Affirmed – This qualifier/option is used to indicate that after processing, errors have been found. Where this is used, the Reason Block will provide specific information on the error(s) found. (See below) e.g., :256D::AFFM//AFFI</p>
REASON	<p>The Reason Block will only appear on MT509 messages where an MT515 (Instruct, Modify, Cancel or DK) submitted by the dealer has been found to have errors by RTRS. Each Reason Code must be enclosed within a Start Reason (:16R:REAS) and End Reason (:16S:REAS) Block.</p>
24B	<p>Reason Code This field is mandatory in the block and will appear on all Not Affirmed messages. There can be multiple reason codes on any MT509 Reject Message; each Reason Code must be enclosed within a Start Reason (:16R:REAS) and End Reason (:16S:REAS) Block. The Reason Code will be populated with the following value: NAFI/GSCC/ – this qualifier will be reflected on all messages that indicate to the dealer that the MT515 it submitted was found to have regulatory errors. It will be followed by a four-character error code corresponding to the specific error that was found. The GSCC subqualifier indicates that the error code which follows is not a standard subqualifier specified by SWIFT.</p> <p> See Appendix B, which provides a list of all error conditions (and associated codes) that would result from the finding of error in a dealer MT515 message. e.g., :24B::NAFI/GSCC/U52B</p>
70D	<p>Reason Narrative (REAS) REAS//GSCC – The reason narrative field will contain a brief description of the error that was found. RSTA – Regulatory Status Code – This indicates a single regulatory status of the trade. See Section 2.9 and note following this table. ETXT – Error Text – This field contains text describing the error. See Appendix B.1 and note following this table. e.g., :70D::REAS//UNSAT Dealer Capacity Missing</p>

Notes regarding REAS:

The REAS block is a repeating block. It may occur up to seven times in a single message. Each instance of the REAS block will contain the :24B::NAFI field as well as the :70D::REAS field.

The RSTA tag (and code) will occur only in the first instance of REAS block, and will not occur in any subsequent REAS blocks.

The ETXT tag (and text) will occur in every instance of the :70D::REAS field.

4.4.3 MT509 Field Analysis

M/O	Tag	Block/ Qualifier	Subqualifier/ Options	Field Description	MT509 Type	
					NAFI	AFFI
				Message Header		
				Password	✓	✓
				Sender	✓	✓
				Message Type	✓	✓
				Receiver	✓	✓
M	:16R:	GENL		Block Start		
M	:20C:	:SEME//		Sender's Message Reference	✓	✓
M	:23G:	INST		Function of the Message - status of instruct, or	✓	✓
		CAST		status of cancel	✓	✓
O	:98C:	:PREP//		Preparation Date/Time	✓	✓
M	:16R:	LINK		Repeat Block Start		
M	:20C:	:MAST//		Dealer External Reference Number	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	LINK		Repeat Block Start		
O	:20C:	:PREV//		Previous External Reference Number	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	LINK		Repeat Block Start		
O	:20C:	:RELA//		Sender's Message Reference Number	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	LINK		Repeat Block Start		
O	:20C:	:LIST//		FICC TID	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	LINK		Repeat Block Start		
O	:20C:	:COMM//		Match Control Number	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	LINK		Repeat Block Start		
O	:20C:	:TRRF//		MSRB Regulator Control Number	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	LINK		Repeat Block Start		

O	:20C:	:INDX//	DEST02	Regulator-Only Input Indicator	✓	✓
M	:16S:	LINK		Repeat Block End		
M	:16R:	STAT		Repeat Block Start		
M	:25D:	:AFFM/	/AFFI	Trade processed without error		✓
			/NAFI	Trade processing resulted in exception	✓	
M	:16R:	REAS		Optional Repeat Block Start		
M	:24B:	:NAFI/	GSCC/	Error Code	✓	
O	:70D:	:REAS/	/GSCC			
			/RSTA	Regulatory Status Code	✓	
			/ETXT	Error Text	✓	
M	:16S:	REAS		Repeat Block End		
M	:16S:	STAT		Repeat Block End		
M	:16S:	GENL		Block End		

Appendix A

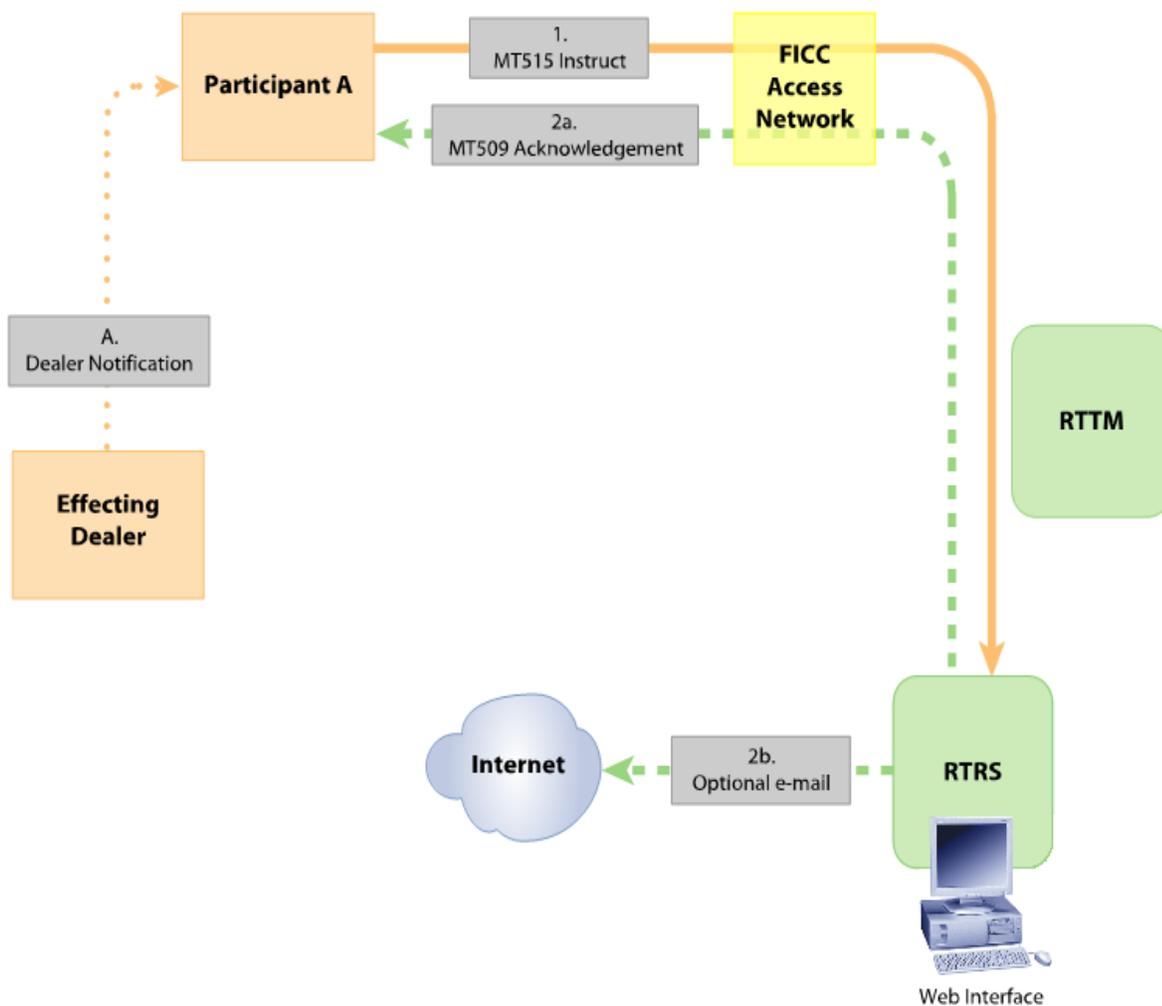
Examples of Data Flows for Regulatory Reporting

General Note for Appendix A

In all examples shown, RTRS continually displays the details and regulatory status of the trade on the RTRS Web Interface screen, where they are visible to all parties to the trade. This fact is not repeated in the explanation of each example.

Examples of Data Flows for Regulatory Reporting

C-1: Customer Trade Reported by Participant

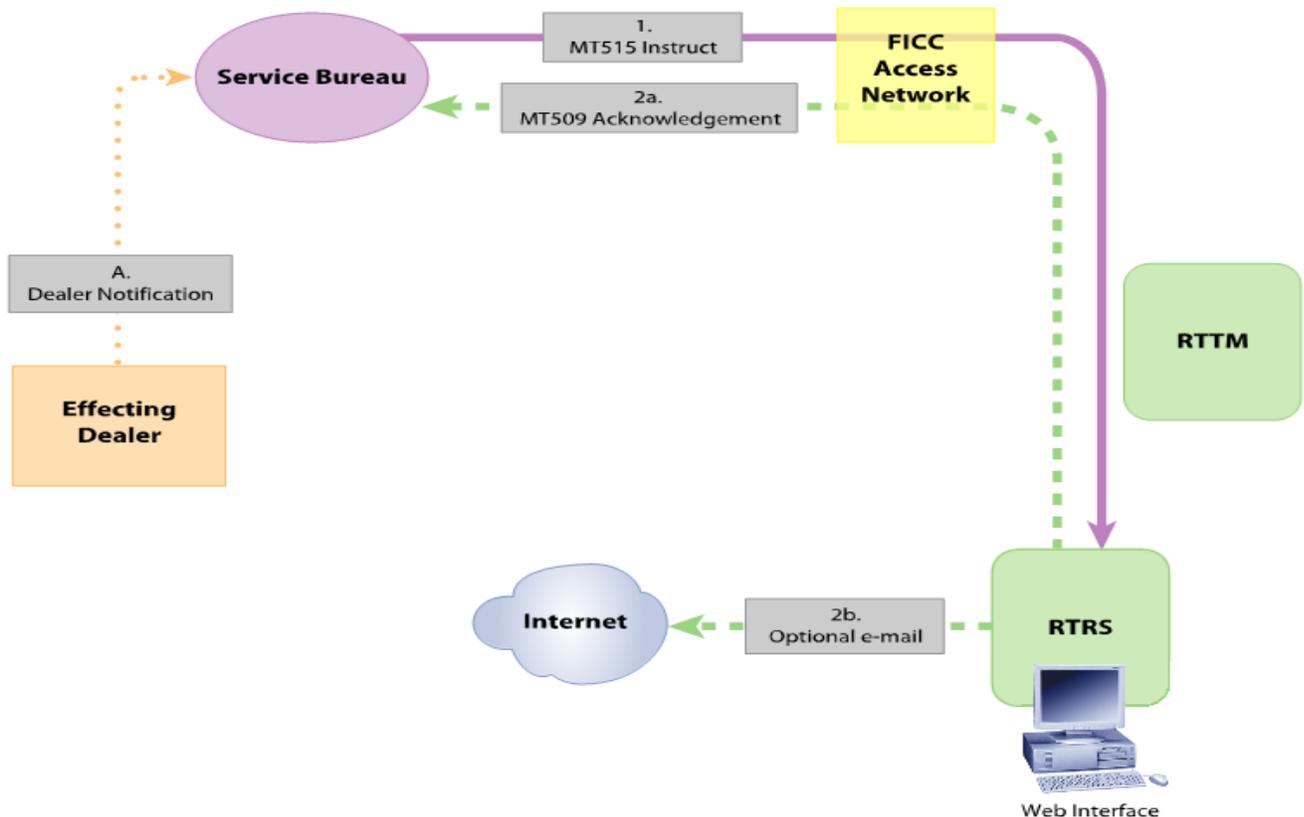


C-1: Customer Trade Reported by Participant via MQ

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting Dealer notifies Participant of customer trade.
 - 1. MT515 Instruct – This input message conveys the customer trade data submitted by Participant for regulatory reporting. The Participant sends the Instruct to the FICC Access Network, which timestamps it and routes it to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant-A acknowledging that its trade has been accepted by RTRS. In this example, the trade was reported on time and without errors. This message also provides the Regulator Control Number assigned by RTRS. The MT509 is sent to the Participant via the FICC Access Network.
 - 2b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to both dealers via Internet.

C-2: Customer Trade Reported by Service Bureau via MQ

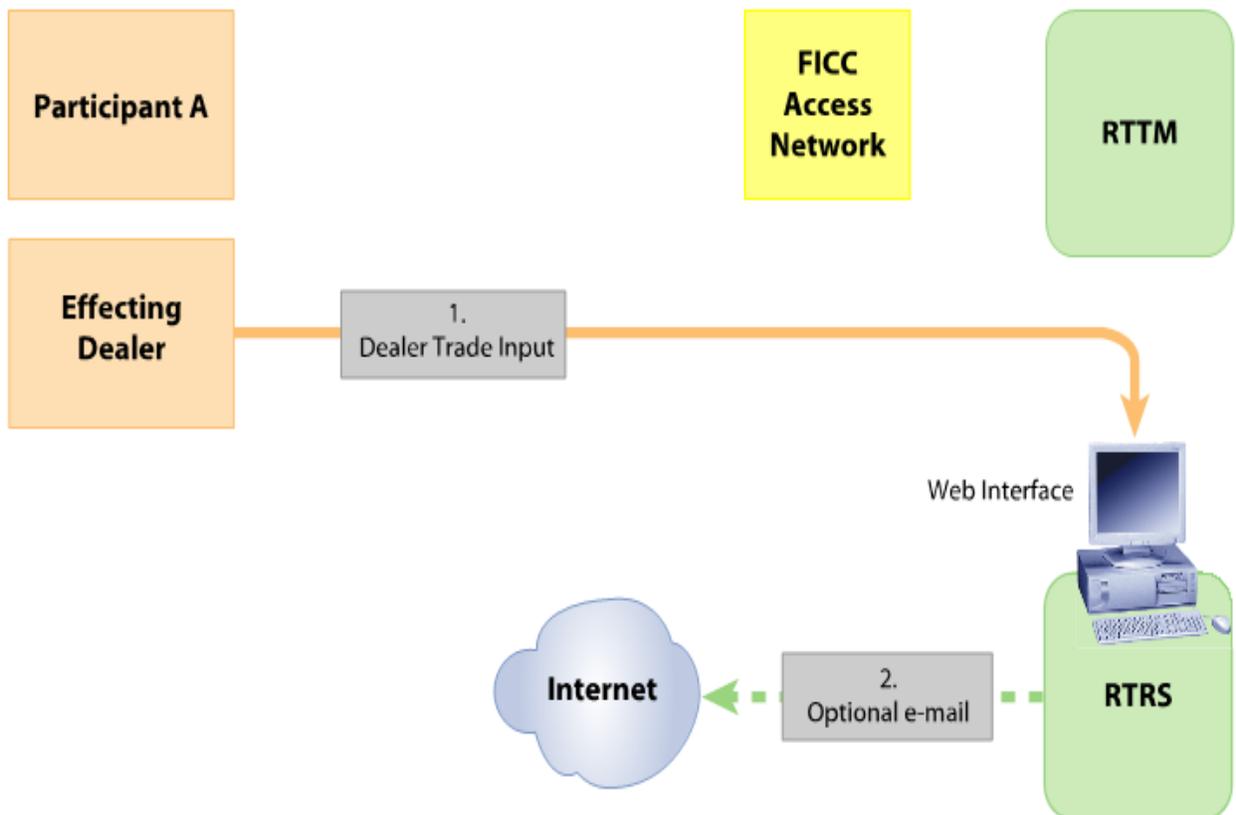


C-2: Customer Trade Reported by Service Bureau via MQ

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting Dealer notifies Service Bureau of customer trade.
1. MT515 Instruct – This input message conveys the customer trade data submitted by Service Bureau for regulatory reporting. The Service Bureau sends the Instruct to the FICC Access Network, which timestamps it and routes it to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Service Bureau acknowledging that its trade has been accepted by RTRS. In this example, the trade was reported on time and without errors. This message also provides the Regulator Control Number assigned by RTRS. The MT509 is sent to the Service Bureau via the FICC Access Network.
 - 2b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to dealer and Service Bureau via Internet.

C-3: Customer Trade Reported by Effecting Dealer via Web

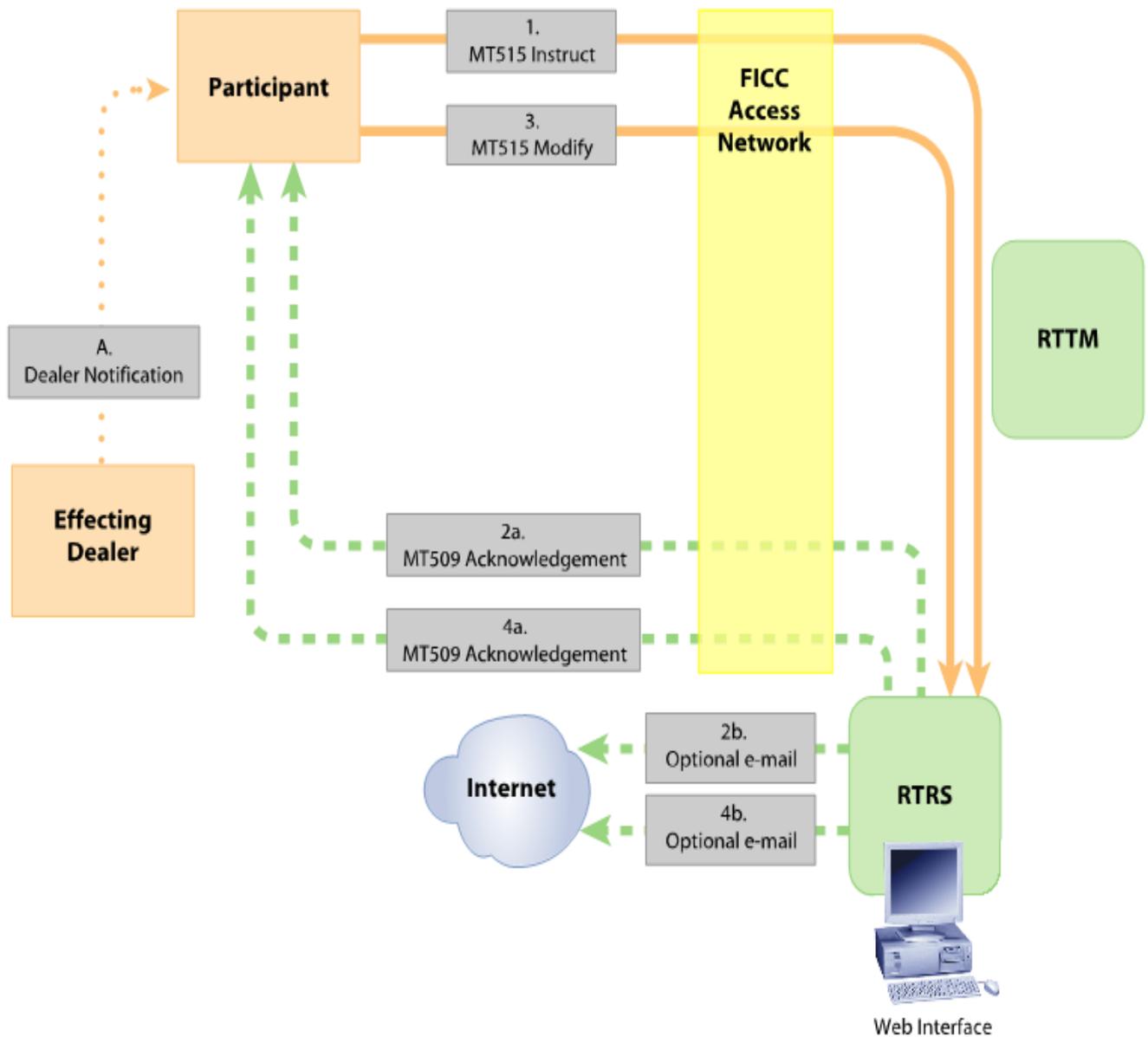


C-3: Customer Trade Reported by Effecting Dealer via Web

Message Flow Explanation:

1. Web Input – The Effecting Dealer enters the trade data into the RTTM Web Interface screen.
2. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer via Internet.

C-4: Customer Trade Modified via MQ

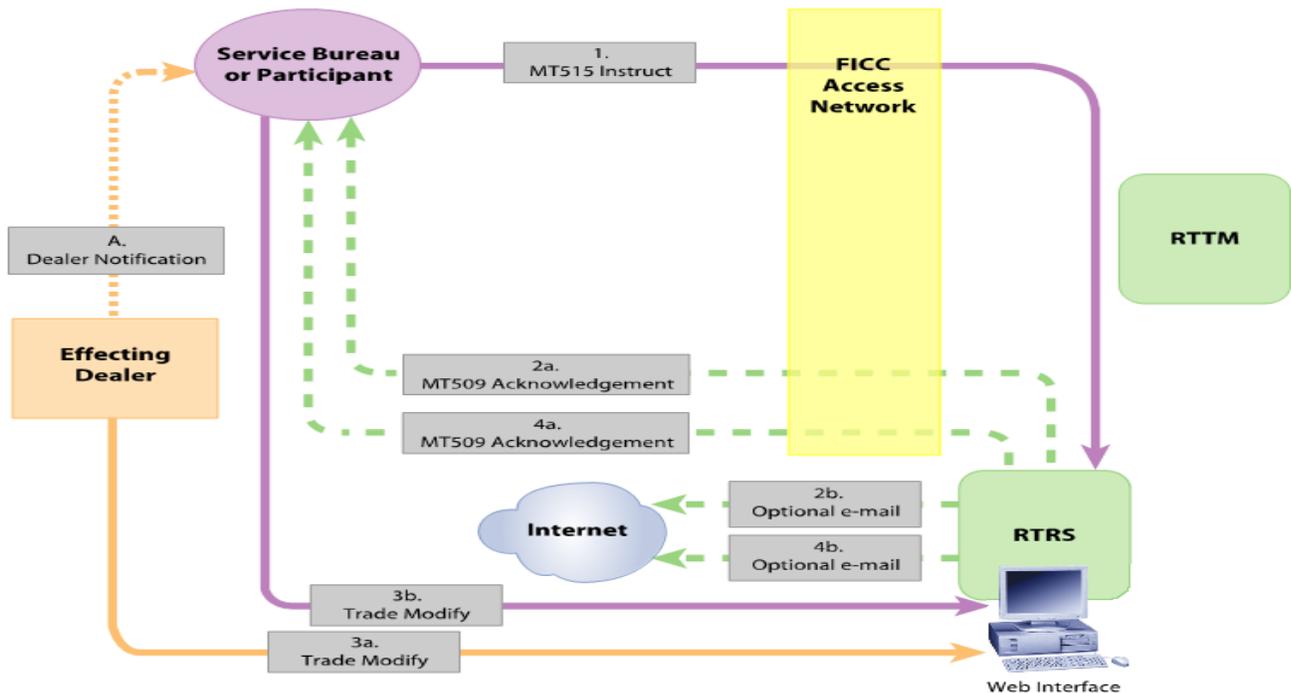


C-4: Customer Trade Modified via MQ

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting dealer notifies Participant or Service Bureau of customer trade.
 - 1. MT515 Instruct – This input message conveys the customer trade data submitted by Participant for regulatory reporting. The participant sends the Instruct to the FICC Access Network, which timestamps it and routes it to RTRS.
 - 2a. MT509 Trade Accepted (with errors) – This output message is sent to Participant acknowledging that its trade has been accepted by RTRS. In this example, RTRS found regulatory errors in the input. The MT509 contains an error code and text for each error in the input message. The MT509 also provides the Regulator Control Number assigned by RTRS. The MT509 is sent to the Participant via the FICC Access Network.
 - 2b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to either dealer via Internet.
 - 3. MT515 Modify – The Participant conveys corrected trade data to RTRS.
 - 4a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTRS. RTRS now finds the trade error-free.
 - 4b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer via Internet.

C-5: Customer Trade Reported via MQ and Modified via Web

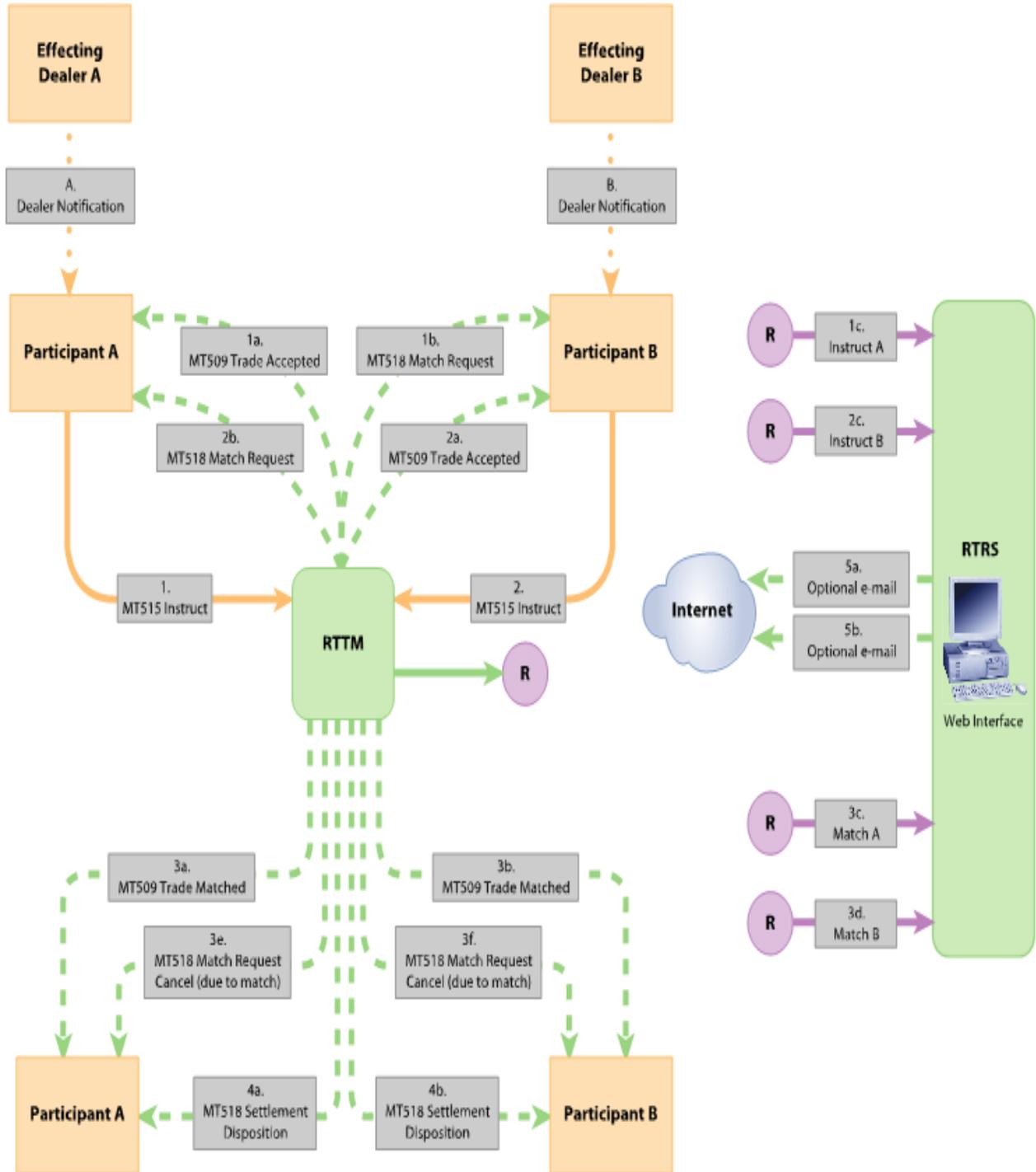


C-5: Customer Trade Reported via MQ and Modified via Web

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting dealer notifies Service Bureau (or Participant) of customer trade.
 - 1. MT515 Instruct – This input message conveys the customer trade data submitted by Service Bureau/Participant for regulatory reporting to RTRS. The participant sends the Instruct to the FICC Access Network, which timestamps it and routes it to RTRS.
 - 2a. MT509 Trade Accepted (with errors) – This output message is sent to Service Bureau/Participant acknowledging that its trade has been accepted by RTRS. In this example, RTRS found regulatory errors in the input. The MT509 contains an error code and text for each error in the input message. The MT509 also provides the Regulator Control Number assigned by RTRS. The MT509 is sent to the Service Bureau/Participant via the FICC Access Network.
 - 2b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer and Submitter via Internet.
 - 3a, 3b. Web Input – The Effecting Dealer or Service Bureau/Participant enters the correct trade data into the RTTM Web Interface screen. *Note:* The Effecting Dealer and the Submitter must coordinate changes between one another. RTRS accepts changes to customer trades via the Web from both the Effecting Dealer and the Submitter.
 - 4a. MT509 Trade Accepted – This output message is sent, via the Access Network, to the Service Bureau/Participant, acknowledging that its Modify has been accepted by RTRS. RTRS now finds the trade error-free.
 - 4b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer and Submitter via Internet.

S-1: Inter-dealer Trade Accepted, No Regulatory Errors (Chart Depicts Bilateral Relationship of Parties to RTTM and RTRS)



S-1: Inter-dealer Trade Accepted, No Regulatory Errors (Chart Depicts Bilateral Relationship of Parties to RTTM and RTRS)

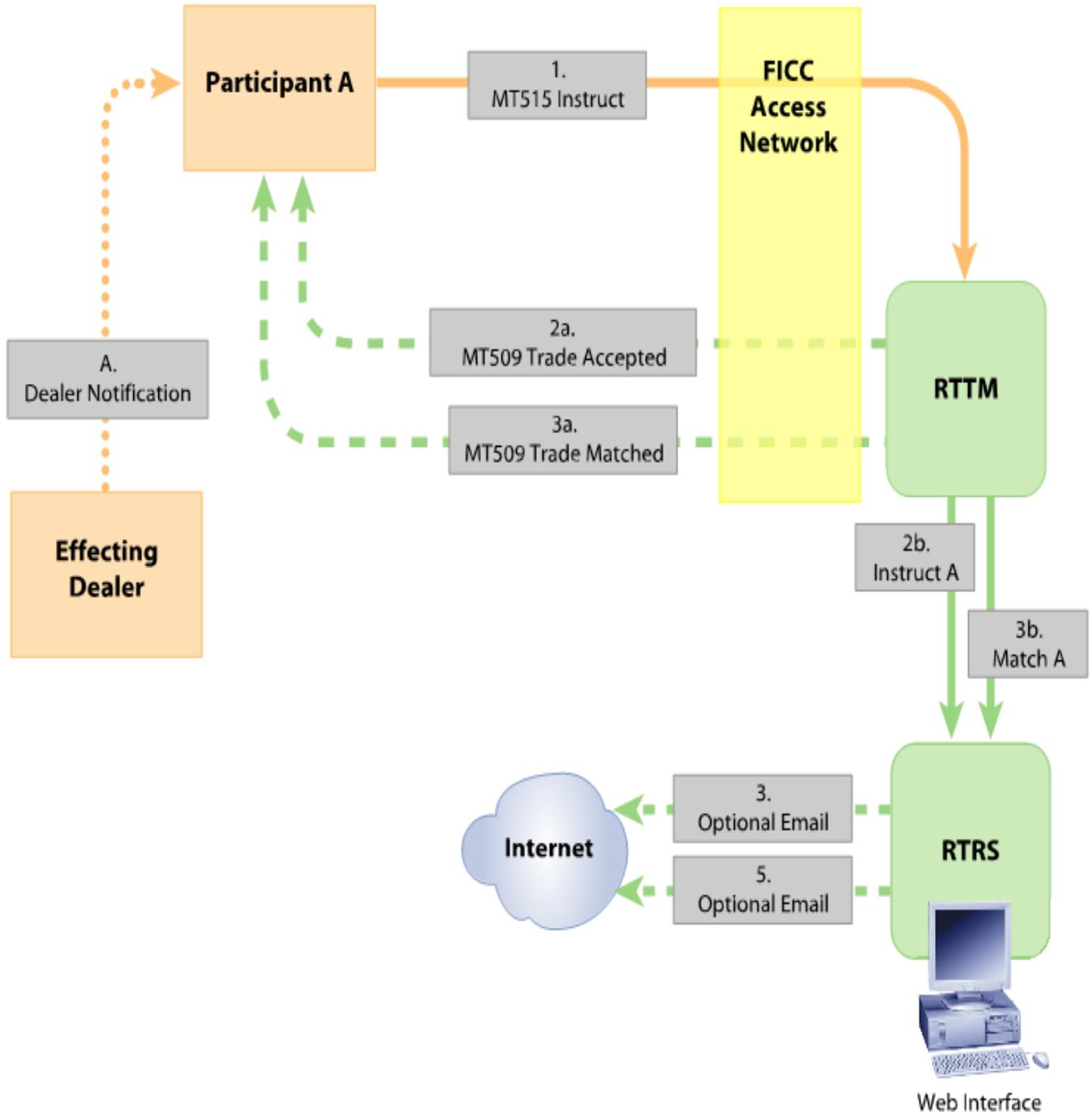


This is the only chart in this series that depicts the bilateral relationship of the parties to RTTM and RTRS. The following charts depict inter-dealer trades as seen by the dealer on one side of the trade.

Message Flow Explanation:

- A, B. Outside of RTTM/RTRS systems – Effecting dealers notify Participants of inter-dealer trade.
- 1,2. MT515 Instruct – This input message conveys the trade data submitted by Participants for matching within RTTM and reporting to RTRS.
- 3a, 4a. MT509 Trade Accepted – This output message is sent to Participants acknowledging that their trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
- 3b, 4b. Event Message – RTTM sends copies of Participant input to RTRS.
- 5a, 6a. MT509 Trade Matched – This output message is sent to Participants informing them that the trade is matched. This message also contains the Match Control Number.
- 8a, 8b E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant. E-mails are sent when RTTM is notified of the instruction (after 3a,b) and after the match (5a, 6a).

**S-2: Inter-dealer Trade Accepted, No Regulatory Errors
(Chart Depicts Relationship of One Side to RTTM/RTRS)**



S-2: Inter-dealer Trade Accepted, No Regulatory Errors (Chart Depicts Relationship of One Side to RTTM/RTRS)

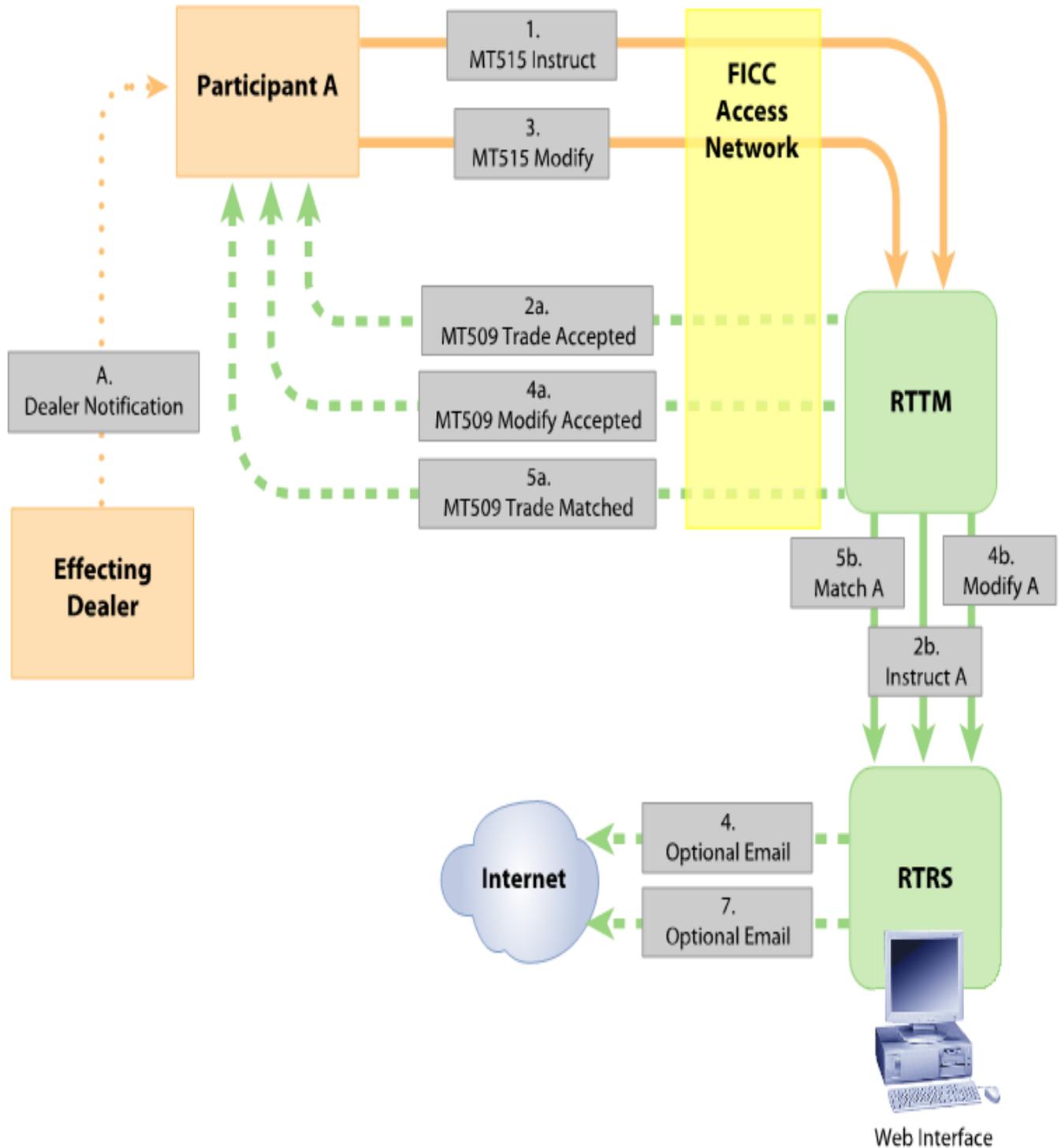


This chart depicts same trade as the previous chart, but shows the relationship of dealers on one side of the trade to RTTM and RTRS. The following charts in this series show the same relationship.

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting Dealer notifies Participant of inter-dealer trade.
 - 1. MT515 Instruct – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. Event Message – RTTM sends copy of Participant input to RTRS.
 - 3. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant.
 - 4a, 4b. MT509 Trade Matched – This output message is sent to Participant informing it that the trade is matched. This message also contains the Match Control Number (COMM). A copy is sent to RTRS.
 - 5. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant

S-3: Inter-dealer Trade Modified Pre-Match, Changes to Match and Regulatory Data via MQ

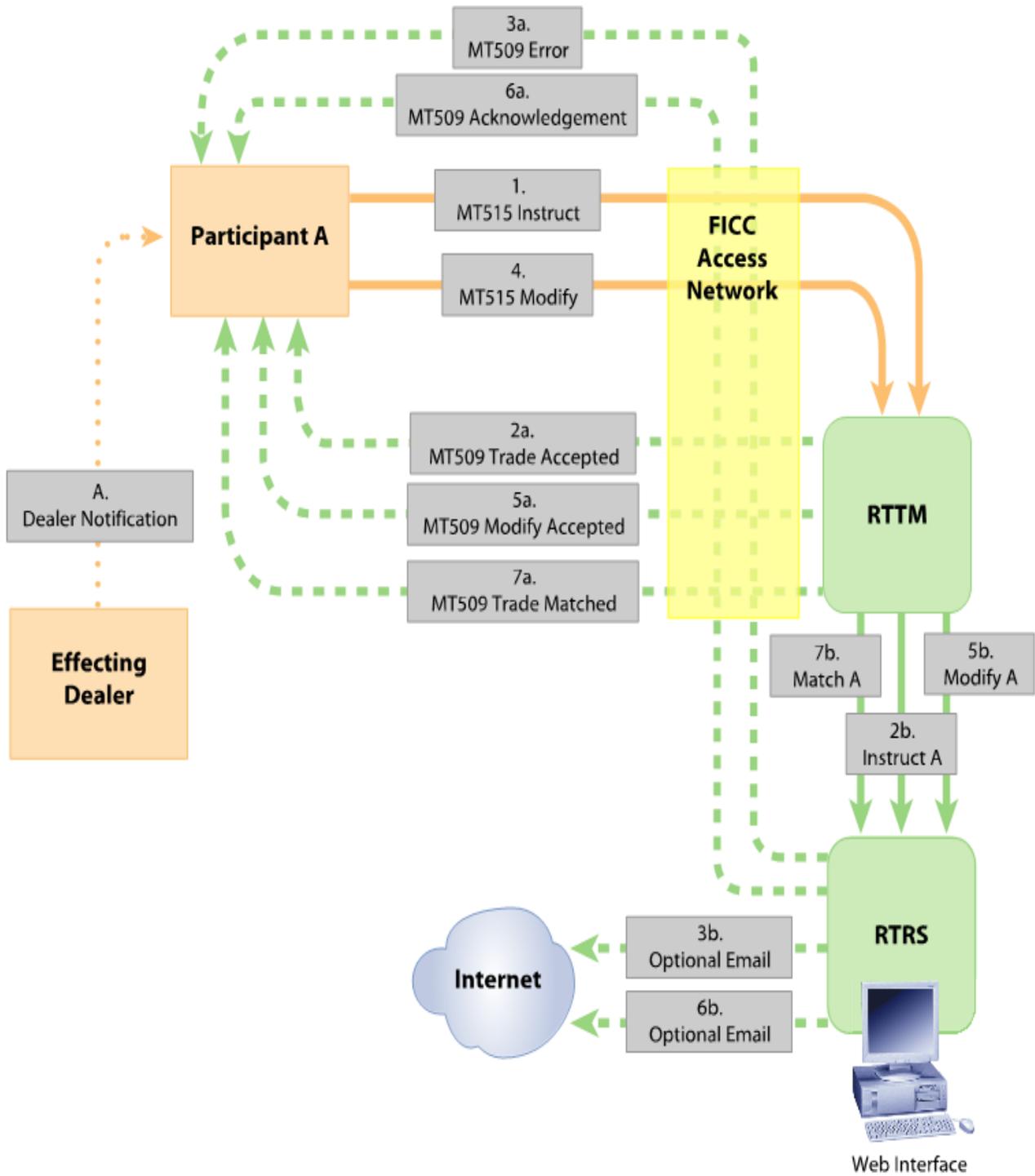


S-3: Inter-dealer Trade Modified Pre-Match, Changes to Match and Regulatory Data via MQ

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting Dealer notifies Participant of inter-dealer trade.
 - 1. MT515 Instruct – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. Event Message – RTTM sends copy of Participant input to RTRS.
In this scenario, the Participant or Effecting Dealer finds the error without RTRS sending an error message, e.g., the Dealer’s Capacity was incorrectly reported. If RTRS had detected an error, the outbound flows as shown in S-4 would be seen.
 - 3. 515 Modify – This input message conveys a pre-match Modification submitted by Participant, correcting the error.
 - 4. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant.
 - 5a. MT509 Modify Accepted – This output message is sent to Participant acknowledging that its Modify has been accepted by RTTM and is awaiting further processing.
 - 5b. Event Message – RTTM sends copy of Participant modify input to RTRS.
 - 6a, 6b. MT509 Trade Matched – At some later time, this output message is sent to Participant informing it that the trade is matched. This message also contains the Match Control Number (COMM). A copy is sent to RTRS.
 - 7. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant.

S-4: Inter-dealer Trade Modified While Trade is Still in RTTM, Changes to Regulatory Data Only - Modified via MQ

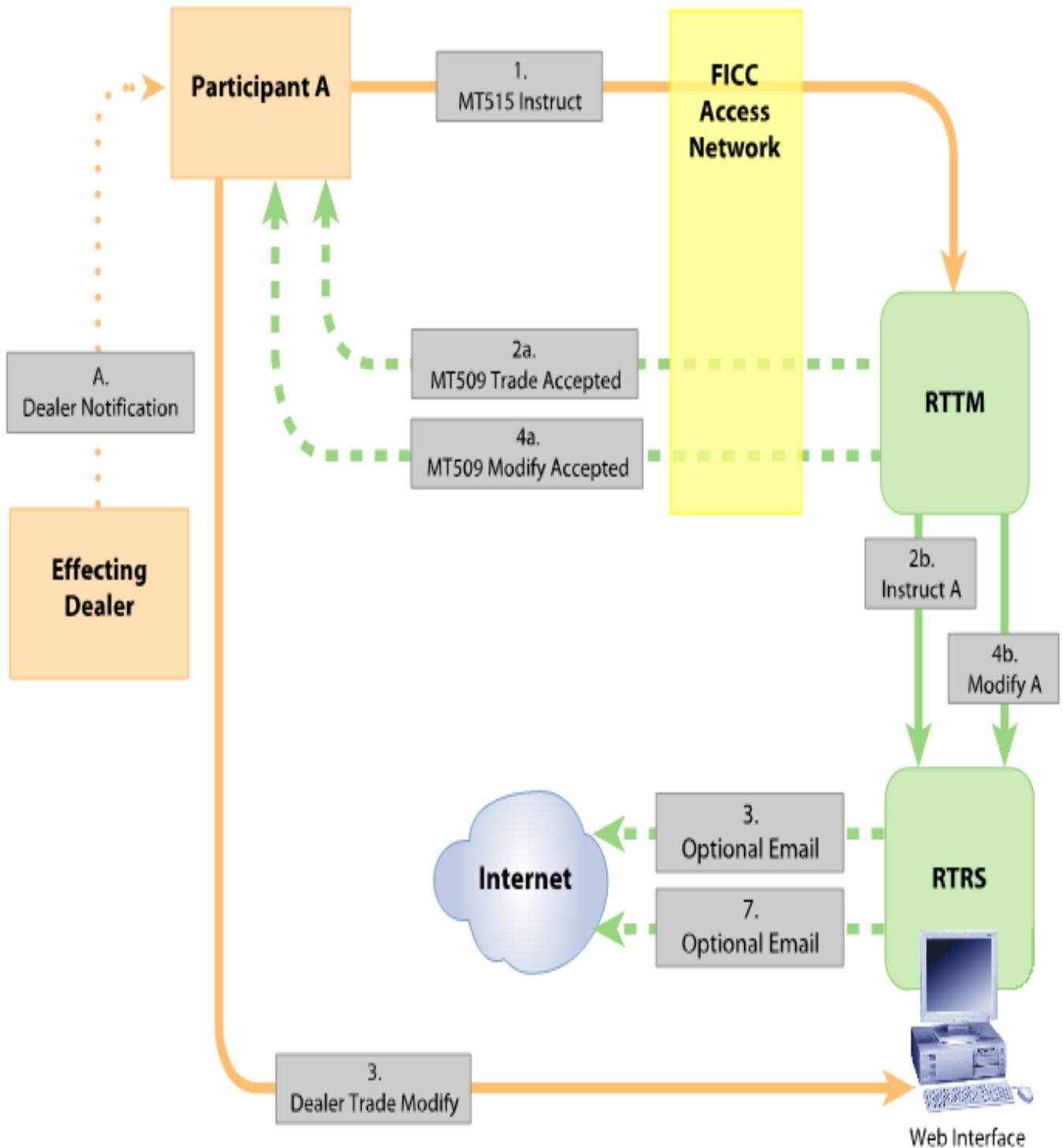


S-4: Inter-dealer Trade Modified While Trade is Still in RTTM, Changes to Regulatory Data Only - Modified via MQ

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting dealer notifies Participant of inter-dealer trade.
 - 1. MT515 Instruct – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. Event Message – RTTM sends copy of Participant input to RTRS.
 - 3a. MT509 Trade Rejected – RTRS sends MT509 to Participant noting problem with regulatory data (e.g., U41D – Dealer symbol not known to MSRB). Message is sent via Access Network but does not update RTTM.
 - 3b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer and Submitter via Internet.
 - 4. MT515 Modify – This input message conveys a pre-match Modify submitted by Participant, correcting the error in regulatory data. Participant directs message to RTTM (because trade is still in RTTM) and RTRS. RTTM stores the change to the regulatory data.
 - 5a. MT509 Trade Accepted – RTTM sends acknowledgement of error-free Modify to Participant.
 - 5b. Event Message – RTTM sends copy of Participant Modify input to RTRS. RTRS stores the change to the regulatory data.
 - 6a. MT509 Trade Accepted – RTRS sends acknowledgement of error-free Modify to Participant. *Note:* RTRS and RTTM both send MT509. RTRS sends a message to acknowledge that Participant has removed error that RTRS detected. RTTM sends a message to acknowledge message that Participant directed to it.
 - 6b. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer and Submitter via Internet.
 - 7a, 7b MT509 Trade Matched – At some later time, this output message is sent to Participant informing it that the trade is matched. This message also contains the Match Control Number (COMM). A copy is sent to RTRS.

S-5: Inter-dealer Trade Modified Pre-Match, Changes to Regulatory Data Only, Modification via Web Interface

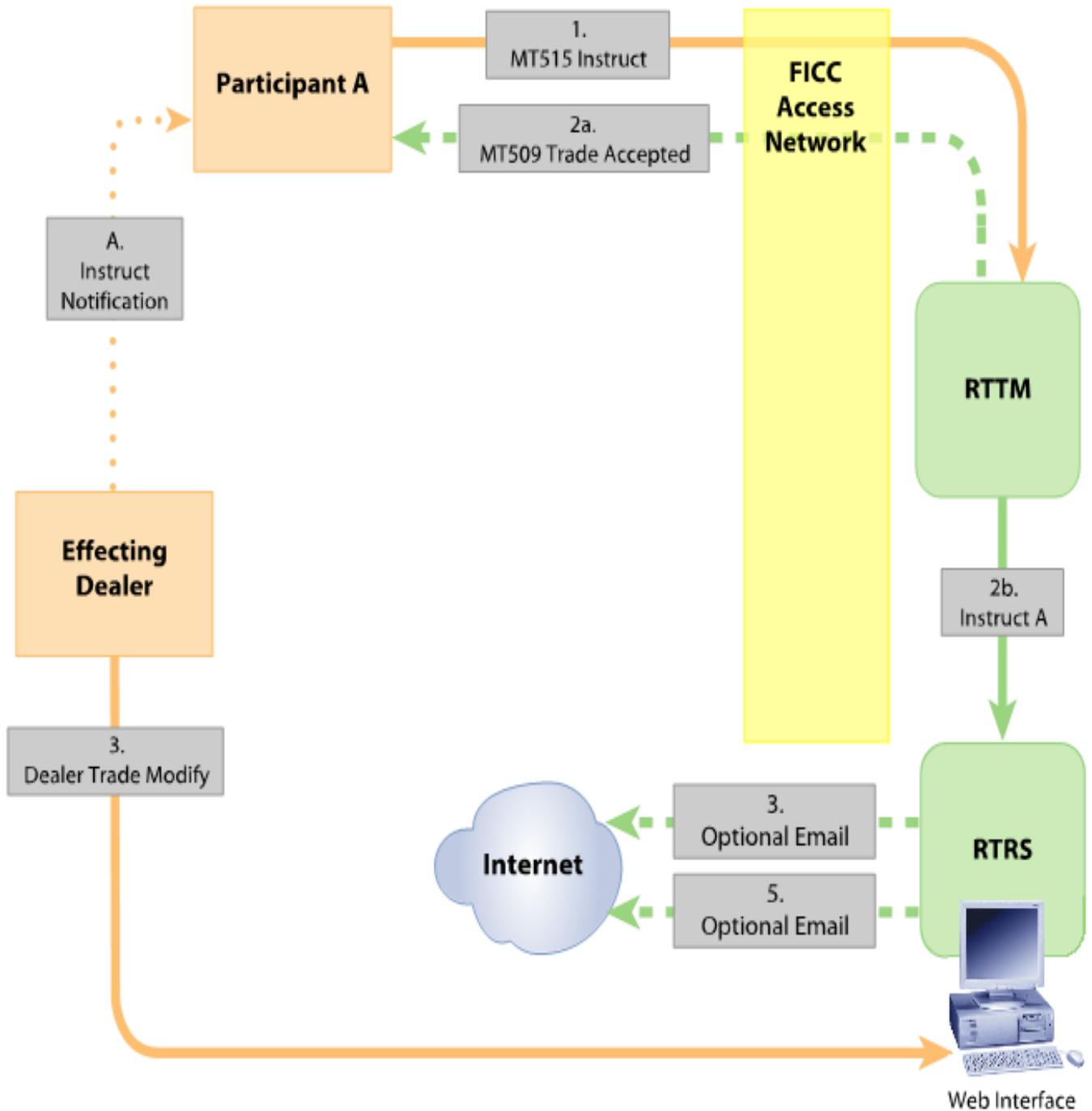


S-5: Inter-dealer Trade Modified Pre-Match, Changes to Regulatory Data Only, Modification by Participant via Web Interface

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting dealer notifies Participant of inter-dealer trade.
 - 1. MT515 Instruct – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. Event Message – RTTM sends copy of Participant input to RTRS.
 - 3. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant. *In this scenario, the Participant or Effecting Dealer finds the error without RTRS sending an error message, e.g., the Dealer's Capacity was incorrectly reported. If RTRS had detected an error, the outbound flows as shown in S-4 would be seen.*
 - 4. Web Input – The Participant modifies the trade data via the RTTM Web Interface screen. Participant directs Modify to RTTM and RTRS
 - 5. MT515 – The RTTM Web Interface generates an MT515 Instruct which is sent to RTTM.
 - 6a. MT509 Trade Accepted – RTTM sends acknowledgement of error-free Modify to Participant.
 - 6b. Event Message – RTTM sends copy of Participant input to RTRS.
 - 7. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant.

S-6: Inter-dealer Trade Modified Pre-Match, Changes to Regulatory Data, Modification by Effecting Dealer via Web Interface



S-6: Inter-dealer Trade Modified Pre-Match, Changes to Regulatory Data, Modification by Effecting Dealer via RTRS Web Interface

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting dealer notifies Participant of inter-dealer trade.
 - 1. MT515 Instruct – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. Event Message – RTTM sends copy of Participant input to RTRS.

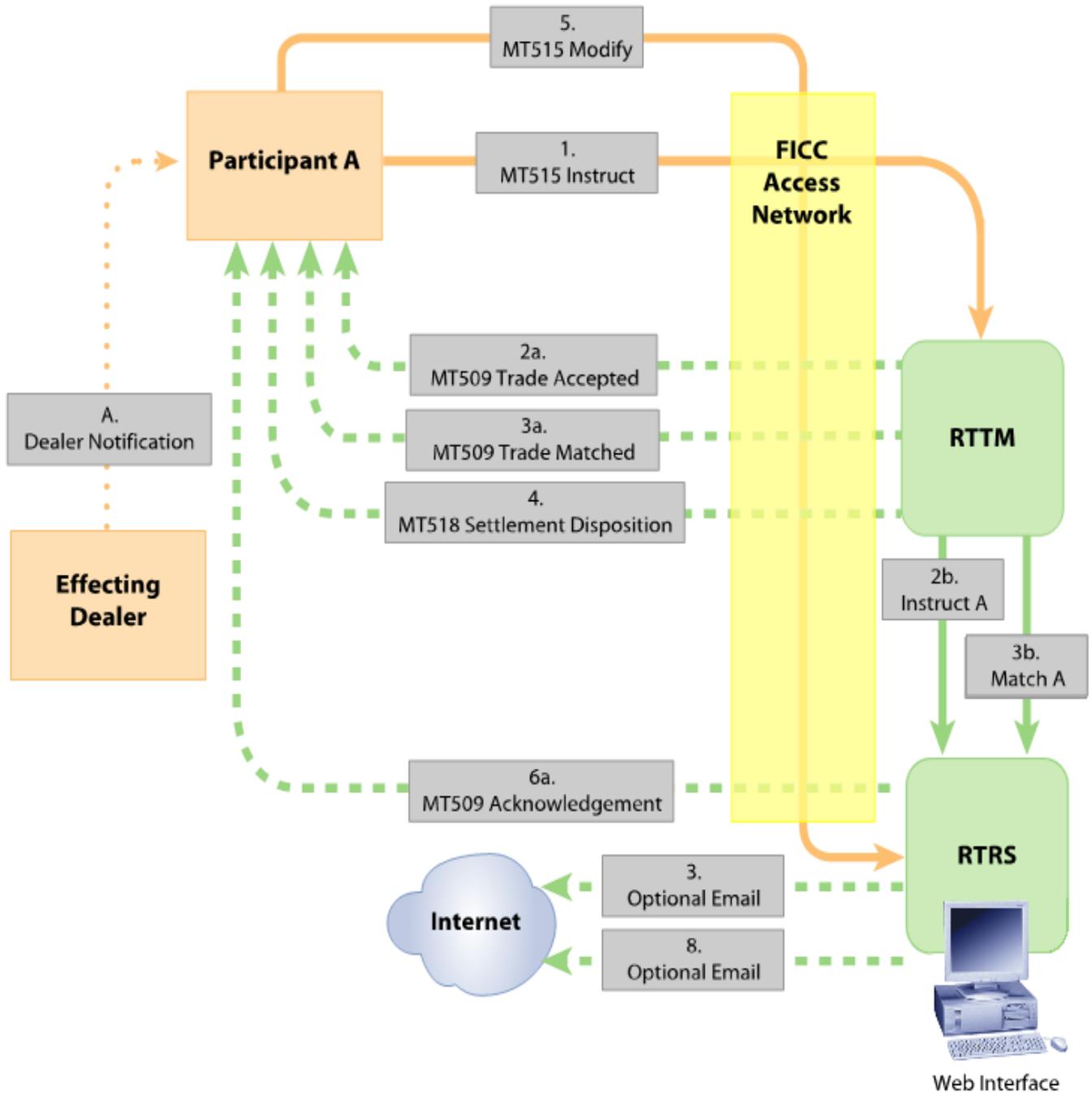
In this scenario, the Effecting Dealer finds the error without RTRS sending an error message, e.g., the Dealer's Capacity was incorrectly reported. If RTRS had detected an error, the outbound flows as shown in S-4 would be seen.

- 3. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant.
- 4. Web Input – The Effecting Dealer modifies regulatory trade data via the RTRS Web Interface screen. Only data needed for regulatory purposes is modified.
- 5. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer and Participant via Internet.



In this scenario, the regulatory data in RTTM has not been updated, because only the Participant can update RTTM. If the Effecting Dealer, outside the RTRS and RTTM systems, notifies the Participant of the regulatory data change, the Participant may submit an MT515 Modify directed to RTTM in order to update the RTTM data. However, it is not a regulatory requirement for regulatory data in RTTM and RTRS to be identical -- the requirement is that RTRS be accurate and up-to-date.

S-7: Inter-dealer Trade Modified Post-Match and Post-Settle, Modification to Regulatory Data Only, via MQ



S-7: Inter-dealer Trade Modified Post-Match and Post-Settle, Modification to Regulatory Data Only, via MQ

Message Flow Explanation:

- A. Outside of RTTM/RTRS systems – Effecting dealer notifies Participant of inter-dealer trade.
 - 1. MT515 Instruct – This input message conveys the trade data submitted by Participant for matching within RTTM and reporting to RTRS.
 - 2a. MT509 Trade Accepted – This output message is sent to Participant acknowledging that its trade has been accepted by RTTM and is awaiting further processing. This message also provides the Transaction ID (TID) assigned by RTTM.
 - 2b. Event Message – RTTM sends copy of Participant input to RTRS.
 - 3. E-mail to Internet – RTRS optionally sends an e-mail with the trade details and regulatory status to the Effecting Dealer and the Participant.
 - 4a, 4b. MT509 Trade Matched – In parallel with RTRS processing, this output message is sent by RTTM to Participant and RTRS informing them that the trade is matched. This message also contains the Match Control Number.
 - 5. MT518 Settlement Disposition – This output message is sent to Participant informing it of the trade’s anticipated Settlement Date or Contractual Settlement Date, at which time the trade will be purged from RTTM.
 - 6. MT515 Modify – After the trade’s anticipated Settlement Date or Contractual Settlement Date, this input message conveys a post-match Modification submitted by Participant, correcting an error in regulatory data. Participant directs message to RTRS only (since trade is no longer on RTTM). *See note.*
 - 7. MT509 Trade Accepted – RTRS sends acknowledgement of error-free Modify to Participant.
 - 8. E-mail – RTRS generates e-mail giving trade details and status, optionally available to the Effecting Dealer and Participant via Internet.



The Effecting Dealer can also make a post-match modification to regulatory data, but the input must be via the RTRS Web Interface as in S-6.

Appendix B: Code Tables

Appendix B.1: RTRS Error Codes

Code	Text
N912	LATE Inst recd with trade date prior to Jan 2 2002. No dealer response required.
N913	LATE Trade reported after deadline
Q06A	QUEST Reversal control number missing or incorrect on your or contraparty report
Q11B	QUEST Dollar price missing for regular way CUSIP
Q11E	QUEST Dollar price out of reasonable range
Q12E	QUEST Yield out of reasonable range
Q117	QUEST Yield not accepted for non-when issued trades
Q141	QUEST No accrd int submitted, and trade not shown as having been traded flat
Q14F	QUEST Calculated accrued interest does not match submitted accrued interest
Q14H	QUEST Accrued interest submitted, but trade indicated as having been traded flat
Q151	QUEST Commission more than 10 percent of dollar price
Q15H	QUEST Commission present on inter dealer trade
Q16H	QUEST Concession present on IDRO or customer trade
Q19F	QUEST Accrued interest different on buyer and seller sides
Q221	QUEST Trade time in the future
Q22E	QUEST Time of trade before 0600 or after 2100
Q22F	QUEST Seller and buyer times of trade differ by more than 15 minutes
Q311	QUEST No CUSIP data available to RTRS.
Q31D	QUEST CUSIP appears to be invalid
Q331	QUEST Par value not a multiple of 1000
Q33F	QUEST Seller and buyer Regulatory Dollar Price differ
Q35J	QUESTCUSIP appears to be a corporate or government security, not a municipal
Q42D	QUEST Clearing ID not known to MSRB
Q44B	QUEST Contra dealer symbol missing
Q44D	QUEST Unknown contra party broker symbol
Q44F	QUEST Contra party you indicated is not the contra party on the matching side
Q471	QUEST Contra intermediate dealer not known to MSRB
Q47D	QUEST Intermediate dealer symbol not known to MSRB
Q491	QUEST Unknown dealer submitter combination
Q492	QUEST Unknown clearing and contra symbol combination

Q49D	QUEST Unknown dealer clearing combination
Q55A	QUEST Seller and buyer alternative trading system special condition indicator differ
Q55B	QUEST Alternative trading system special condition present on a customer trade
Q55C	QUEST Non- transaction-based compensation special condition indicator present on inter-dealer trade.
Q55D	QUEST Invalid special condition indicator
Q55E	QUEST Non-transaction-based compensation indicator present on an agency trade with commission,
Q55F	QUEST Special condition indicator inconsistent with trade history
Q64D	QUEST Trade indicator is not locked in on IDRO report
Q64I	QUEST Trade indicator is not cash on customer report
Q66E	QUEST COCO no longer used, field must be omitted
Q35J	QUEST CUSIP appears to be a corporate or government security, not a municipal
S90A	SATIS No regulatory data changed. Any previous errors still stand.
S99A	SATIS Acknowledgment. No error conditions found.
U01G	UNSAT Trade report has participant xref number already in use. Change xref.
U06B	UNSAT Reversal control number missing
U11C	UNSAT Dollar price in wrong format
U12C	UNSAT Yield in wrong format
U15C	UNSAT Commission in wrong format
U15H	UNSAT Commission present on principal trade
U16C	UNSAT Concession in wrong format
U211	UNSAT Modified trade date is greater than instruct receipt date
U212	UNSAT Trade date in the future
U21C	UNSAT Trade date or time in wrong format
U22E	UNSAT Modified interdealer trade time greater than instruct receipt time
U231	UNSAT Settlement date is before trade date
U31D	UNSAT CUSIP check digit missing or incorrect
U33C	UNSAT Par value in wrong format
U33D	UNSAT Par may not be zero
U41B	UNSAT Dealer symbol missing
U41D	UNSAT Dealer symbol not known to MSRB
U43D	UNSAT Submitter not known to MSRB
U52B	UNSAT Dealer capacity missing
U53B	UNSAT Regulatory Dollar Price missing
U55F	UNSAT Special condition indicator inconsistent with trade details
X01B	UNSAT Dealer reference number missing
X01G	UNSAT Trade report has dealer reference number already in use
X211	UNSAT Cannot change trade date
X22E	UNSAT Modified customer or IDRO trade time greater than instruct receipt time

X311	UNSAT Cannot change CUSIP
X34E	UNSAT Par should not be in units
X411	UNSAT Cannot modify effecting dealer symbol
X41B	UNSAT Dealer symbol missing
X421	UNSAT Cannot modify clearing broker ID
X51E	UNSAT Market of execution code not muni
X62F	UNSAT Interdealer submission must be sent to both RTTM and RTRS
X901	UNSAT Cannot modify match data with regulatory only modify. Submit to RTTM
X911	UNSAT Instruct received with trade date prior to Jan 2 2002.
X921	UNSAT Modify or cancel does not match any stored side
X922	UNSAT Modify or cancel received for trade already canceled
X924	UNSAT Cannot identify previous record. Provide TID or regulatory control number.
X925	UNSAT Modify or cancel received more than two years after trade date
X93A	UNSAT Unparsable MT515 message

Appendix B.2: Other RTRS Code Tables

Special Condition Indicator (Previously ‘Special Price Reason Code’)

The following chart displays the valid Special Condition Indicators, which are described in Section 4.3.2. Omit this field if the trade is subject to the MSRB 15-minute reporting requirement and no special condition applies.

	No Special Price			Flat			Away from Market -Other Reason		
		ATS	NTBC		ATS	NTBC		ATS	NTBC
No Alternate Deadline		M001	M002	M100	M101	M102	M900	M901	M902
LOP/TD Transaction (EOD)	M020	M021							
Short Term (EOD)	M030	M031	M032	M130	M131	M132	M930	M931	M932
Inter-Dealer Ineligible on Trade Date	M040	M041		M140	M141		M940	M941	
Resubmission of RTTM Cancel	M050	M051		M150	M151		M950	M951	

- Mccc Mandatory - If conditions apply, must be included on report
- Mccc Optional - Use to claim exception to 15-minute deadline
- Invalid – No Code Available

The MSRB may in the future establish additional Special Condition Indicators for common situations. All Special Condition Indicators will be available on the MSRB's Web Site, <http://www.msrb.org/>.

Message Originator (MEOR) Codes

MEOR Identifier (used on MT515 and MT518 in field :95Q::MEOR//)	MEOR Identifier Codes
	Non-dealer organizations that submit messages on behalf of NSCC Participants via the message portal, sometimes referred to as “service bureaus”, have the option to use the MEOR field to identify messages originating from their systems. Contact the MSRB to obtain a valid originator code for use in the MEOR field.

Appendix B.3: RTRS Regulatory Status Codes

The Regulatory Status Code (RSTA) in the MT509 supplements the LATE, QUEST, or UNSAT abbreviation about the trade by indicating a “regulatory status” for the trade, taking into account multiple errors and prior messages about the trade. It is used primarily by RTTM Web to determine whether to display a trade in the “Satisfactory” or “Questionable” area of the Web screen. This Appendix gives additional information for programmers who may wish to make use of the RSTA information.

RTRS responds to an MT515 Instruct, Modify or Cancel as follows:

If the MT515 is error-free and on time and if RTTM has acknowledged it by sending an MT509 ACK, then RTRS does not respond, except as follows. The exceptions are that, even if RTTM has acknowledged the MT515, (1) RTRS will send an MT509 in response to an error-free modification that corrects errors previously detected by RTRS, and (2) RTRS will send an MT509 in response to an error-free modification that does not actually change the data in the prior submission. In case (1), the RTRS MT509 includes 25D::AFFM//AFFI. Since the SWIFT format does not allow a Reason (REAS) block in an AFFI message, there is no Regulatory Status Code (RSTA) in this message. In case (2), the RTRS MT509 includes error S90A - SATIS No regulatory data changed. The Regulatory Status code in this message is SATI. The trade's status is satisfactory.

If the MT515 is error-free and on time and if RTTM has not acknowledged it by sending an MT509 ACK, then RTRS responds by sending an MT509 that includes 25D::AFFM//AFFI. As noted above, since SWIFT format does not allow a Reason (REAS) block in an AFFI message, there is no Regulatory Status Code (RSTA) in this

message. The trade’s status is Satisfactory. The single exception, as above, is when RTRS receives an error-free modification that does not actually change any data, in which case RTRS sends an MT509 S90A – SATIS.

If the MT515 has an error or is late, the RTRS response depends upon whether it is an Instruct or a Modify/Cancel and upon the type of error, as shown by the first letter in the error code (24B::NAFI/ GSCC/xxxx), as follows:

If the MT515 is late (first letter of error code = “N”), the MT509 RSTA is QUES. The trade’s status is Questionable.

If the MT515 has a “question” error (first letter = “Q”), the MT509 RSTA is also QUES. The trade’s status is Questionable.

If the MT515 has an “unsatisfactory” error that *can be corrected* (first letter = “U”), the MT509 RSTA is UNSA. The trade’s status is Unsatisfactory.

If the MT515 has an “unsatisfactory” error that *cannot be corrected* (first letter = “X”) and if the MT515 is an Instruct, the MT509 RSTA is NSTA. The trade does not have a defined regulatory status. (RTRS treats the Instruct as though it had not been reported, because the trade cannot be referenced in the database or another basic operational rule was violated– for example, X01G – Trade report has dealer reference number already in use.)

If the MT515 has an “unsatisfactory” error and is a Modify or Cancel that cannot be applied to an Instruct (first letter = “X”), then the Instruct is not changed or canceled and it retains its regulatory status. In particular:

If the MT515 refers to an Instruct that has no defined regulatory status, or the MT515 cannot be associated with an instruct, the MT509 RSTA is NSTA.

If the MT515 refers to an Instruct that is Satisfactory, the MT509 RSTA is XSAT. The trade’s status remains Satisfactory.

If the MT515 refers to an Instruct that is Questionable, the MT509 RSTA is XQUE. The trade’s status remains Questionable.

If the MT515 refers to an Instruct that is Unsatisfactory, the MT509 RSTA is XUNS. The trade’s status remains Unsatisfactory.

These conditions are summarized in the following table.

Type of 515 Message Received	Does RTRS Apply the 515 to the Database?	First Letter of 509 Error Code	509 RSTA Regulatory Status Code	Regulatory Status of Transaction
Instruct, Modify, Cancel	Yes	None (509 AFFI)	None	Satisfactory

Instruct, Modify, Cancel	Yes	N or Q	QUES	Questionable
Instruct, Modify, Cancel	Yes	U	UNSA	Unsatisfactory
Modify	Yes	S (S90A only)	SATI	Satisfactory
Instruct	No	X	NSTA	None
Modify or Cancel that cannot be associated with an Instruct	No	X	NSTA	None
Modify or Cancel	No	X	XSAT	Satisfactory
Modify or Cancel	No	X	XQUE	Questionable
Modify or Cancel	No	X	XUNS	Unsatisfactory

The column “First Letter of 509 Error Code” refers to the “worst” error, as described in Section 2.9.

Appendix B.4: RTTM Codes²⁷

Message Reject Reason Codes

Reject Error Code Qualifiers (to be used on MT509) in field :24B::REJT/	Error Conditions Which Can Cause an MT515 to be Rejected by RTTM
GSCC/E001	External Reference Error
GSCC/E002	Previous External Reference Error
GSCC/E003	Trade Not Eligible For Cancellation
GSCC/E004	Unknown Security
GSCC/E005	Bad Quantity
GSCC/E006	Bad Trade Date
GSCC/E007	Bad Settlement Date
GSCC/E008	Bad Price
GSCC/E009	Bad Amount
GSCC/E010	Bad Buyer Party
GSCC/E011	Bad Seller Party
GSCC/E012	Broker Reference Number Error
GSCC/E013	Transaction Type Error
GSCC/E014	Price Method Error
GSCC/E015	Commission Error
GSCC/E016	Password Error
GSCC/E017	Buyer Executing Firm Error

²⁷ It should be noted that while most of the codes contained in these tables are used to support GSCC, MBSCC and NSCC RTTM, some codes are used only by one clearing corporation, and may not be used by the other.

Reject Error Code Qualifiers (to be used on MT509) in field :24B::REJT/	Error Conditions Which Can Cause an MT515 to be Rejected by RTTM
GSCC/E018	Seller Executing Firm Error
GSCC/E019	Start Amount Error ²⁸
GSCC/E020	Start Date Error ²
GSCC/E021	End Amount Error ²
GSCC/E022	End Date Error ²
GSCC/E023	Repo Rate Error ²
GSCC/E024	Secondary X-ref Error ²
GSCC/E025	Substitution Type Error ²
GSCC/E026	Substitution Number Error ²
GSCC/E027	Substitution Collateral Error ²
GSCC/E028	Substitution Variance Error ²
GSCC/E029	Substitution Frequency Error ²
GSCC/E030	Trade Not in Same State
GSCC/E101	Give Up Period Error ²
GSCC/E102	Trade Service Type Error ²
GSCC/E103	Option Type Error ²
GSCC/E104	Option Expiry Date Error ²
GSCC/E105	Account Trade Restricted ²
GSCC/E201	ABS Turnaround Number Error
GSCC/E202	Market of Execution Error
GSCC/E203	Trade Type/Target Indicator Error
GSCC/E204	Destination Indicator Error
GSCC/E205	Inconsistent Recipient Information
GSCC/E206	Issue Type Error
GSCC/E207	Settlement Date Adjustment Error
GSCC/E208	Settlement Type Error
GSCC/E209	Interest Error
GSCC/E210	Concession Error
GSCC/E211	Branch Sequence Number Error
GSCC/E212	Unknown Target Application
GSCC/E998	Trade Not Found
GSCC/E999	Other Bad Data
GSCC/F001	Illegal Operation Attempted
GSCC/F002	Internal Process Error
GSCC/F999	Non-SWIFT Compliant Message

² Supports only GSCC and MBSCC products.

²⁸ Supports only GSCC and MBSCC products.

DK Reason Codes²⁹

DK Reason Codes (to be used on MT515 and MT518 in field :70E::TPRO//GSCC/DKRS)	DK Reasons
E004	Unknown Security
E005	Bad Quantity
E006	Bad Trade Date
E007	Bad Settlement Date
E008	Bad Price
E009	Bad Amount
E010	Bad Buyer Party
E011	Bad Seller Party
E013	Transaction Type Error
E014	Price Method Error
E015	Commission Error
E017	Buyer Executing Firm Error
E018	Seller Executing Firm Error
E019	Start Amount Error ³⁰
E020	Start Date Error ⁴
E021	End Amount Error ⁴
E022	End Date Error ⁴
E023	Repo Rate Error ⁴
E025	Substitution Type Error ⁴
E026	Substitution Number Error ⁴
E027	Substitution Collateral Error ⁴
E028	Substitution Variance Error ⁴
E029	Substitution Frequency Error ⁴
E100	Unknown Cancel
E101	Give Up Period Error ⁴
E102	Trade Service Type Error ⁴
E103	Option Type Error ⁴
E104	Option Expiry Date Error ⁴
E106	Incorrect Account Symbol
E107	Duplicate Trade
E201	ABS Turnaround Number Error
E202	Market of Execution Error
E203	Trade Type/Target Indicator Error
E206	Issue Type Error
E207	Settlement Date Adjustment Error

²⁹ It should be noted that while most of the codes contained in these tables are used to support GSCC, MBSCC and NSCC RTTM, some codes are used only by one clearing corporation, and may not be used by the other.

³⁰ Supports only GSCC and MBSCC products.

DK Reason Codes (to be used on MT515 and MT518 in field :70E::TPRO//GSCC/DKRS)	DK Reasons
E208	Settlement Type Error
E209	Interest Error
E210	Concession Error
E211	Branch Sequence Number Error
E998	Trade not found
E999	Other Bad Data

Message Reason Codes

Message Reason Codes (to be used on MT518 in field :70E::TPRO//GSCC/MSGR)	Message Reasons
DKTD	Due to DK
DCTD	Due to DK Remove
MACH	Due to Match
COAC	Due to Contra Action
GSAC	Due to RTTM Action
YRAC	Due to your Action

Destination Codes

Destination Codes (to be used in field :70E::TPRO//GSCC/DEST)	Destination
01	RTTM
02	MSRB
03	FINRA

Issue Type

Issue Type Codes (to be used in field :70E::TPRO//GSCC/ITYP)	Issue Type
SY	Syndicate Trade
TS	Target Syndicate Trade
RW	Regular Way (ABS only)
NI	New Issue (ABS only)

Settlement Disposition Codes

Settlement Disposition Codes (to be used in field :70E::TPRO//GSCC/SDSP)	Settlement Disposition Method
CNSE	CNS Eligibility
CNSN	Not CNS
CPRO	Comparison Only
TFTD	Trade for Trade