



Factored Securities Market Practice

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Changes to previous versions	
Version 1.0 August 2010	Update market practice into SMPG format
Version 1.1 November, 2010	Update to Cash Party sequence recommendation for US DTCC and Fedwire payments/receipts
Version 1.2, December, 2010	Update to Cash Party sequence recommendation based on discussions at ISITC December, 2010 conference Open question listed on DTC SPO charge credits
Version 1.3, February 2010	Addition of market practice disclaimer

Version 1.4, Nov, 04, 2014	<ul style="list-style-type: none"> <input type="checkbox"/> Edits based on review by SWIFT standards as part of SMPG MyStandards usage guidelines <ul style="list-style-type: none"> <input type="checkbox"/> Definitions section in scope updated with rate indicator used in message samples <input type="checkbox"/> CMOs added to the Business Date Elements Section B <input type="checkbox"/> Removal of contradictory wording in market practice rules section VI <input type="checkbox"/> Addition and Subtraction sign added to Net money calculation in market practice rules section <input type="checkbox"/> Local market identifier format option R added to Client of Receiving/Delivering Agent field table on page 8 <input type="checkbox"/> Message Usage Rules Linkers/TIPs updated to clarify recommended as mandatory <input type="checkbox"/> Removal of 70E::PACO in sample F <input type="checkbox"/> Addition of INTM intermediary cash party recommendations on page 9 as well as further clarity on PAYE vs. BENM usage <input type="checkbox"/> Removal of 13B::POOL field from samples as not part of the recommendation <input type="checkbox"/> Removal of the 12A::CLAS field from the samples as ISITC recommendation only applicable when non-street recognized security ID is populated <input type="checkbox"/> Expansion of definition of a Bond with Sinking Provision to include other bond agreements such as CMOs and MUNIs. Previously only referenced Corp. Bonds with Sinking Fund Provision.
Version 1.5	<ul style="list-style-type: none"> <input type="checkbox"/> Inclusion of statement on IBAN usage after review at April, 2015 SMPG meetings
Version 1.6	<ul style="list-style-type: none"> <input type="checkbox"/> Change to recommendation for Cash parties usage in ISO 15022 <input type="checkbox"/> Inclusion of ISO 20022 illustrations
Version 1.7	<ul style="list-style-type: none"> <input type="checkbox"/> Add Interest Adjustment, code word INTT, for updating Floating Rate Coupon Bonds <input type="checkbox"/> Alternative Payments use of MT202/210 added

I. Scope and definitions:

This document is intended to define and describe the settlement instructions relating to factored securities and floating rate coupon bonds. This market practice addresses instructions and communication between Investment Managers and their Custodian and/or Accounting Service providers.

Factored securities are debt instruments that have a factor that is used in the calculation of net money and market value. How the factor is used depends on the product type. It should be noted that each product type requires different processing appropriate to its category.

Examples of Factored Securities:

- Asset Backed Securities (ABS)
- Bond Agreements with Sinking Fund Provisions
- Collateralized Obligations (CO)
- Mortgage-Backed Securities (MBS)
- Treasury Inflation Protected Securities (TIPS) issued by the U.S. Treasury
- Linkers – Any type of Inflation Protected Security issued by the U.S. Treasury or other entity

Floating Rate Coupon Bonds are debt instruments that have a variable coupon rate that is used in the calculation of net money and market value. In some cases the current rate is not published for several weeks after the effective date.

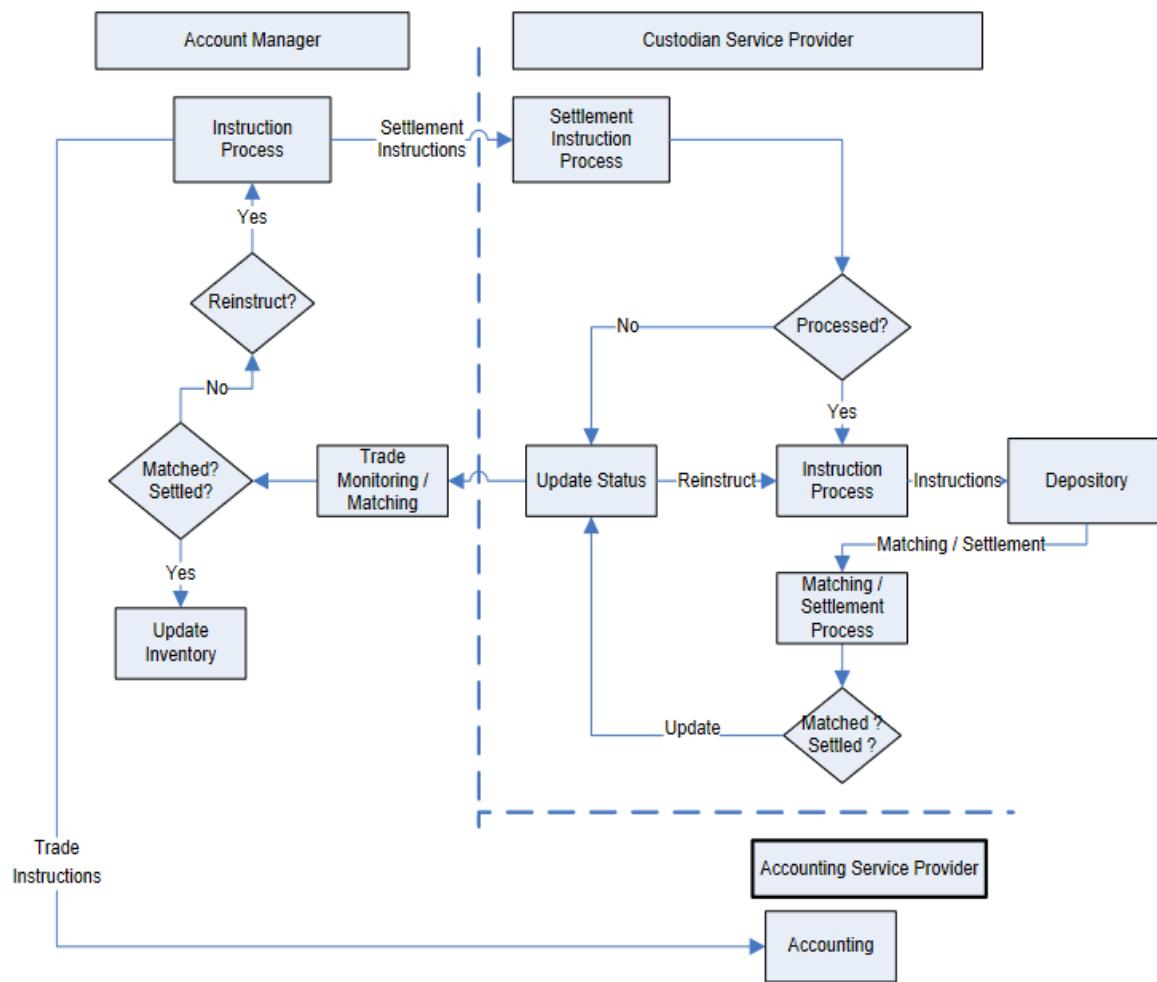
Definitions

Factor	A number that is used in the calculation of net money or market value for a debt instrument. Identified as factor rate.
Index Rate or Ratio Factor	The factor used to adjust the principal in a TIPS or Linker security. Identified as index factor.
Pay down Factor	The factor used to denote the amount of principal paid down by the borrower of the loan or mortgage. Identified as current factor.
Sinking Fund Factor	The factor used to denote the amount of debt that has been called back to the sinking fund. Identified as current factor
Inflation Linked Bonds or linkers	Usually treasury bonds where the principal is indexed to inflation
Unit Bonds	A bond that trades in units, not in face amount
Original Face	Face amount or quantity of a debt instrument <u>not</u> adjusted by a factor
Current Face	The product of the original face multiplied by the factor for a debt instrument
TIPS	Treasury-Inflation Protected Securities (TIPS) are securities whose principal is tied to the Consumer Price Index (CPI). With inflation, the principal increases. With deflation, it decreases. When the security matures, the U.S. Treasury pays the original or adjusted principal, whichever is greater. TIPS pay interest at a fixed rate. However, for coupon payments, the rate is applied to the adjusted principal, so interest payments can vary in amount from one period to the next. If inflation occurs, the interest payment increases. In the event of deflation, the interest payment decreases.
Coupon Rate	This is the cost to borrow and can either be a fixed amount or a variable amount.

II. Actors and Roles:

Account Manager	Trade Executing Party	Custodian Service Provider	Depository	Accounting Service Provider
Investment Manager/ Hedge Funds	Broker Dealer	Global Custodian Prime Broker	Sub-Custodian Securities Depository	Accounting Agent

III. Activity Diagram:



IV. Sequence Diagrams:



V. Business data requirements:

A. Generic Instruct settlement:

Business elements	Additional information
Message reference	
Trade Date	ISO 8601 Date/Time
Settlement Date	ISO 8601 Date/Time
Quantity of Financial Instrument	See specific instructing settlement section below (B)
Financial Instrument	ISO 6166 International Securities Identification Number [ISIN]
Settlement Amount	Currency and amount
Safekeeping Account to be credited or debited	
Place of Settlement	ISO 9362 Bank Identifier Codes [BIC] taken from the list of PSET's BIC published on www.smpg.info . See also Receiving Delivering Depository – PSET and PSAF MP
Receiving/Delivering Agent	ISO 9362 Bank Identifier Codes [BIC] or CSD Local Code
Client of Receiving/Delivering Agent	ISO 9362 Bank Identifier Codes [BIC]
Country specifics as per local market practice (if any)	

B. Specific Instruct settlement:

Mortgage / Asset Backed Securities and Collateralized Obligations

Business elements	Additional information
Original Face	Mandatory
Current Face	Conditional*
Pay down Factor	Optional

*Current face has been agreed to be mandatory when the instruction is being sent by the Investment Manager to the Global Custodian who is also acting as their fund accountant. Otherwise, the field is considered optional.

Bond Agreement w/ Sinking Funds

Business elements	Additional information
Original Face	Mandatory
Current Face	Conditional*
Sinking Fund Factor	Optional

*Current face has been agreed to be mandatory when the instruction is being sent by the Investment Manager to the Global Custodian who is also acting as their fund accountant. Otherwise, the field is considered optional.

TIPs/Linkers

Business elements	Additional information
Original Face	Mandatory for par bonds
Units	Mandatory for unit bonds
Current Face	Conditional*
Index Rate /Ratio Factor	Mandatory

*Current face has been agreed to be mandatory when the instruction is being sent by the Investment Manager to the Global Custodian who is also acting as their fund accountant. Otherwise, the field is considered optional.

VI. Market Practice Rules:

If both original and current face are provided in a message using proper formats, it is the responsibility of the receiver to use the proper one for any downstream processing (e.g., sending to local CSD)

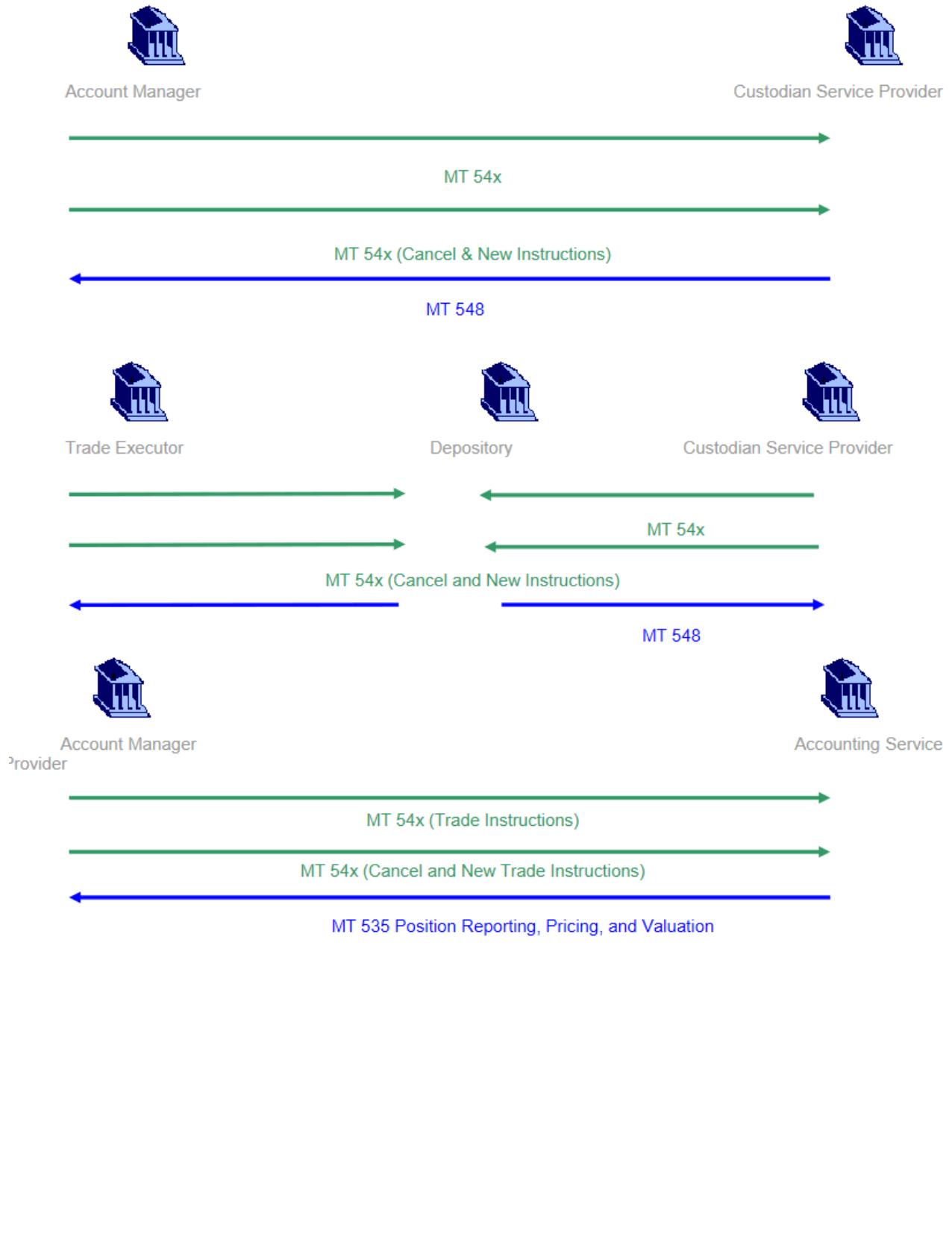
The price used for TIPS is the un-inflated price. This is also known as the ‘clean’ or “market” price. This price does not include the factor. (Do not use the inflated price.)

Factored Securities

The index rate/ratio or inflation factor used for Linkers is the factor associated with settle date of the trade.

Net Money = (“Original Face” x “Un-inflated Price” x “Settle Date Inflation Factor”) +/-
 “Accrued Interest”

VII. ISO 15022 illustration:



Data	ISO 15022
Instruction Identification	:20C::SEME//16x
Trade Date	:98A::TRAD//YYYYMMDD
Settlement Date	:98A::SETT//YYYYMMDD
Quantity of Financial Instrument	:36B::SETT//FAMT/15d
Quantity of Financial Instrument	:36B::SETT//AMOR/15d
Financial Instrument	:35B::ISIN1!e12lc [4*35x]
Settlement Amount	:19A::SETT//[N]3!a15d
Safekeeping Account to be credited or debited	:97A::SAFE//35x
Place of Settlement	:95P::PSETT//4!a2!a2!c
Receiving/Delivering Agent	:95P::REAG//4!a2!a2!c or :95R::REAG/8c/34x :95P::DEAG//4!a2!a2!c or :95R::DEAG/8c/34x
Client of Receiving/Delivering Agent	:95R::BUYR//4!a2!a2!c or 95R::BUYR/8c/34x :95P::SELL//4!a2!a2!c or 95R::SELL/8c/34x

VIII. Message Usage Rules:

Linkers/TIPs

The Original Face or Units and Current Face should be provided.

The use of 92A::INDX is recommended as mandatory for Linkers/Tips

Mortgage / Asset Backed Securities – Factor Updates

The Original Face and Current Face should both be provided, even if the factor is equal to one.

When trading factored securities, the current factor is not always known at the time of the trade, even though this current factor may be effective. When this is the case, the market convention is to initially settle the trade with the previous or most current known factor and then adjust for the difference when the current factor becomes available. It is the net amount of the trade that needs to be adjusted due to the updated factor:

Original face * current factor = current face

Current face * trade price +/- interest = net amount of trade

Bond Agreement with Sinking Fund Provisions:

The Original Face and Current Face should both be provided, even if the factor is equal to one.

Any bond issue that is backed by a sinking fund provision to lessen interest rate and default risk by setting aside a pool of funds to repurchase a portion of the existing bond/debt. Ultimately, resulting in a smaller final repayment at maturity. Most commonly applied to corporate bonds, but also can apply to other bond agreements such as Municipal Bonds (MUNIs) and Collateralized Mortgage Obligations (CMOs).

Pre-settlement

For the scenario in which the “current” factor or coupon rate becomes known on or prior to contractual settlement, the normal cancel and rebook process should be followed. In this case, the Account Manager will cancel the trade and send across new trade and settlement instructions. This new trade will have the new current factor or coupon rate and additionally reflect the new net amount. No special processing by the Custodian Service Provider is required, and no special (post settlement) factor update identifiers should be used.

Post-settlement

The more complex scenario is in which the current factor or coupon rate does not become known until after contractual settlement of the trade, in this case, specific processing is required since the securities (the trade) would have already settled.

A settled trade is not able to be cancelled on custody platforms, therefore the normal cancel and rebook messages are not appropriate.

In this scenario, the original face amount of the trade has been settled correctly, but because of the recent factor update or coupon rate change, the net amount of money associated with the trade is incorrect, and needs to be adjusted. Because of this, the Account Manager will need to cancel the previously sent settlement / trade instructions, and resend new settlement / trade instructions to both the Custodian and Accounting Service Providers (most times the same party).

The following additional business elements are required to be included in the cancel and new settlement / trade instructions for post settlement factor updates:

- 1) Qualifier to indicate that the cancel and new trade are part of a factor update or coupon rate change
- 2) Reference number to link the new instructions (which include the new factor) to the original instructions (which reflected the old factor)
- 3) The new settlement / trade instructions or additional instructions need to indicate the cash movement, reflective of the difference in the net amount of the trade.

Note: A factor adjustment is not a corporate event.

Messaging Sequence

1. Send a cancel for the original trade
 - a. Identify the cancel as a Factor Update (In ISO 15022 - FCTA) or Coupon Rate Change (In ISO 15022 – SETR/INTT). This allows the receiving party to know you aren't really canceling a settled trade, rather than a new instruction with a factor or coupon rate update is being provided.
2. Send the rebook trade (with the proper net money)
 - a. Include a link to the original trade that has settled, so the receiving party can adjust their records appropriately
 - b. Identify it as a Factor or Coupon Rate Update.
 - c. Identify the direction of cash movement as a gain or loss (19A::ANTO). If ANTO is not provided look for an MT202/210 (PACS.009/CAMT.057) message
 - 1) How to use the "N" in ANTO
 1. :19A::ANTO//USDxxxx,xx (for a gain, receipt)
 2. :19A::ANTO//NUSDxxxx,xx (for a loss, payment)
- d. On **Delivery:** (Alternatively to 19A use MT202/210 or PACS.009/CAMT.057)
 - i. Include a Cash Sequence to provide instructions of where to pay the cash difference: If the trade originally settled DTCC, then you will be using an SPO charge:
95R ::ACCW/DTCYID/<DTC Identifier>
If the trade originally settled Fedwire, then you will be using ABA Number
95R ACCW/USFW/<ABA Number>
 - ii. Provide a second occurrence of the cash party sequence to include the Beneficiary BIC (95P::BENM), or if not available then Beneficiary Name (95Q::BENM) in Sequence E2 along with the Cash Account (97A::SAFE)
- e. On **Receipt:** (Alternatively to 19A use MT202/210 or PACS.009/CAMT.057)
 - a) Provide an occurrence of the cash party sequence to include the Paying Institution BIC (95P::PAYE), or if not available then Paying Institution Name (95Q::PAYE) in Sequence E2
 - b) Provide, if required, a second occurrence of the cash party sequence to include the underlying ordering client (95P::DEBT) or if not available then Debtor Name (95Q::DEBT)

f. Intermediary Institution (95a::INTM) is optionally allowed on **both** the delivery and receipt cash party sequence if applicable.

Below are examples of the Cash Party Sequence for both payments and receipts respectively

Fedwire Delivery	DTCC SPO Charge Debit	
:16R:CSHPRTY	:16R:CSHPRTY	
:95R::ACCW/USFW/XXXXXXXXXX	:95R::ACCW/DTCYID/00000000	Clearing Party on behalf of beneficiary
:16S:CSHPRTY	:16S:CSHPRTY	
:16R:CSHPRTY	:16R:CSHPRTY	
:95P:: BENM //BICAUS33	:95P:: BENM //BICAUS33	Beneficiary BIC or Name
If not available, then	If not available, then	
95Q::BENM with name	95Q::BENM with name	
:97A::CASH//XYZZY	:97A::CASH//XYZZY	Cash Account of Beneficiary
:16S:CSHPRTY	:16S:CSHPRTY	
:16R:CSHPRTY	:16R:CSHPRTY	
:95P::INTM//BICAUS33	:95P::INTM//BICAUS33	Intermediary
:16S:CSHPRTY	:16S:CSHPRTY	
Fedwire Receipt	DTCC SPO Charge Credit	
:16R:CSHPRTY	:16R:CSHPRTY	
:95P:: PAYE //BICAUS33	:95P:: PAYE //BICAUS33	Paying Institution
If not available, then	If not available, then	
95Q:: PAYE	95Q:: PAYE	
:16S:CSHPRTY	:16S:CSHPRTY	
:16R:CSHPRTY	:16R:CSHPRTY	
:95P:: DEBT //BICAUS33	:95P:: DEBT //BICAUS33	Debtor
If not available, then 95Q::DEBT	If not available, then 95Q::DEBT	
:16S:CSHPRTY	:16S:CSHPRTY	
:16R:CSHPRTY	:16R:CSHPRTY	
:95P::INTM//BICAUS33	:95P::INTM//BICAUS33	Intermediary
:16S:CSHPRTY	:16S:CSHPRTY	

ADDITIONAL NOTE:

In sequences C and E2, for field 97a::CASH, when IBAN is used (*either through mandate or otherwise*) then this should be populated as format E as documented within the SWIFT user handbook format option recommendation. Format A should be reserved for proprietary account identifiers.

Sample Message Formats:

A. Linker/TIPS Factored Security (MT541)

```
:16R:GENL
:20C::SEME//12345TIPS
:23G:NEWM
:16S:GENL
:16R:TRADDET
:98A::SETT//20070118
:98A::TRAD//20070117
:90A::DEAL//PRCT/99,121093750      Uninflated price
:35B:ISIN US1234567891
TREASURY (CPI) NOTE
:16R:FIA
:98A::MATU//20170115
:98A::ISSU//20070116
:92A::INTR//2,3750000
:92A::IDX//0,99986000          Index Factor associated with settle date for current face calculation
:16S:FIA
:16S:TRADDET
:16R:FIAC
::36B::SETT//FAMT//5440000,0000
::36B::SETT//AMOR/5439238,4000
:97A::SAFE//TEST ACCOUNT
:16S:FIAC
:16R:SETDET
:22F::SETR//TRAD
:16R:SETPRTY
:95P::PSET//FRNYUS33
:16S:SETPRTY
:16R:SETPRTY
:95R::DEAG/USFW/000001234
:97A::SAFE//TSY
:16S:SETPRTY
:16R:SETPRTY
:95R::SELL/DTCYID/00001234
:16S:SETPRTY
:16R:AMT
:19A::SETT//USD5392503,16
:16S:AMT
:16R:AMT
:19A::DEAL//USD5391432,59
:16S:AMT
:16R:AMT
:19A::ACRU//USD1070,57
:16S:AMT
:16S:SETDET
```

B. CORPORATE w/ SINKING FUND (MT543)

:16R:GENL
:20C::SEME//12345SINK
:23G:NEWM
:16S:GENL
:16R:TRADDET
:98A::SETT//20070308
:98A::TRAD//20070305
:90A::DEAL//PRCT/104,500000000
:35B:ISIN US1234567891
CORPORATE BOND
:16R:FIA
:98A::MATU//20181215
:98A::ISSU//19990302
:92A::INTR//7,4160000
:92A::CUFC//0,72450000
:16S:FIA
:16S:TRADDET
:16R:FIAC
:36B::SETT//AMOR/72450,0000
:36B ::SETT//FAMT//100000,0000
:97A::SAFE//TEST ACCOUNT
:16S:FIAC
:16R:SETDET
:22F::SETR//TRAD
:16R:SETPRTY
:95P::PSET//DTCYUS33
:16S:SETPRTY
:16R:SETPRTY
:95R::REAG/DTCYID/00001234
:16S:SETPRTY
:16R:SETPRTY
:95R::BUYR/DTCYID/0000124
:16S:SETPRTY
:16R:AMT
:19A::SETT//USD76949,00
:16S:AMT
:16R:AMT
:19A::DEAL//USD75710,25
:16S:AMT
:16R:AMT
:19A::ACRU//USD1238,75
:16S:AMT
:16S:SETDET

C. MBS Factored Security (MT 543)

:16R:GENL
:20C::SEME//12345MBS
:23G:NEWM
:16S:GENL
:16R:TRADDET
:98A::SETT//20060920
:98A::TRAD//20060918
:90A::DEAL//PRCT/100,816406250
:35B:ISIN US1234567891
GNMA 30YR
:16R:FIA
:98A::MATU//20341015
:98A::ISSU//20041001
:92A::INTR//6,00000000
:92A::CUFC//0,73336721
:16S:FIA
:16S:TRADDET
:16R:FIAC
:36B::SETT//AMOR/161735,3400
:36B::SETT//FAMT/220538,0000
:97A::SAFE//TEST ACCOUNT
:16S:FIAC
:16R:SETDET
:22F::SETR//TRAD
:16R:SETPRTY
:95P::PSET//FRNYUS33
:16S:SETPRTY
:16R:SETPRTY
:95R::REAG/USFW/00000123
4 :97A::SAFE//MBS
:16S:SETPRTY
:16R:SETPRTY
:95R::BUYR/DTCYID/0000123
4 :16S:SETPRTY :16R:AMT
:19A::SETT//USD163567,92
:16S:AMT
:16R:AMT
:19A::DEAL//USD163055,76
:16S:AMT
:16R:AMT
:19A::ACRU//USD512,16
:16S:AMT
:16S:SETDET

D. Factor Update Example Cancel - Post Settlement (MT 541 CANC)

```
:16R:GENL
:20C::SEME//12345CANCEL
:23G:CANC
:16R:LINK
:20C::PREV//INITIALTRADE
:16S:LINK
:16S:GENL
:16R:TRADDET
:98A::SETT//20070305
:98A::TRAD//20070228
:90A::DEAL//PRCT/100,906250000
:35B:ISIN US1234567891
FGOLD 30YR GIANT
:16R:FIA
:98A::MATU//20370301
:98A::ISSU//20070201
:92A::INTR//6,00000000
:92A::CUFC//1,00000000
:16S:FIA
:16S:TRADDET
:16R:FIAC
:36B::SETT//FAMT/35000000,0000
:36B::SETT//AMOR/35000000,0000
:97A::SAFE//TEST
:16S:FIAC
:16R:SETDET
:22F::SETR//FCTA
:16R:SETPRTY
:95P::PSET//FRNYUS33
:16S:SETPRTY
:16R:SETPRTY
:95R::DEAG/USFW/000001234
:97A::SAFE//MBSBROKER
:16S:SETPRTY
:16R:SETPRTY
:95R::SELL/DTCYID/00001234
:16S:SETPRTY
:16R:AMT
:19A::SETT//USD35340520,83
:16S:AMT
:16R:AMT
:19A::DEAL//USD35317187,50
:16S:AMT
:16R:AMT
:19A::ACRU//USD23333,33
:16S:AMT
:16S:AMT
:16S:SETDET
```

E. Factor Update Example Rebook Fedwire – Post Settlement (MT 543)

:16R:GENL
:20C::SEME//REBOOK
:23G:NEWM
:16R:LINK
:20C::PREV//ORIGINAL TRADE
:16S:LINK
:16S:GENL
:16R:TRADDET
:98A::SETT//20070305
:98A::TRAD//20070228
:90A::DEAL//PRCT/100,906250000
:35B:ISIN US1234567891
FGOLD 30YR GIANT
:16R:FIA
:98A::MATU//20370301
:98A::ISSU//20070201
:92A::INTR//6,00000000
:92A::CUFC//0,99470095
:16S:FIA
:16S:TRADDET
:16R:FIAC
:36B::SETT//FAMT/35000000,0000
:36B::SETT//AMOR/34814533,2500
:97A::SAFE//TEST
:16S:FIAC
:16R:SETDET
:22F::SETR//FCTA
:16R:SETPRTY
:95P::PSET//FRNYUS33
:16S:SETPRTY
:16R:SETPRTY
:95R::DEAG/USFW/000000001
:97A::SAFE//BROKERMBS
:16S:SETPRTY
:16R:SETPRTY
:95R::SELL/DTCYID/00001234
:16S:SETPRTY
:16R:CSHPRTY
:95R::ACCW/USFW/000000000
:16S:CSHPRTY
:16R:CSHPRTY
:95P::BENM//BICAUS33XXX
:97A::CASH//00000000
:16S:CSHPRTY
:16R:AMT
:19A::SETT//USD35153249,65
:16S:AMT
:16R:AMT
:19A::DEAL//USD35130039,96
:16S:AMT
:16R:AMT
:19A::ACRU//USD23209,69

:16S:AMT

:16R:AMT

:19A::ANTO//NUSD187271,18
:16S:AMT
:16S:SETDET

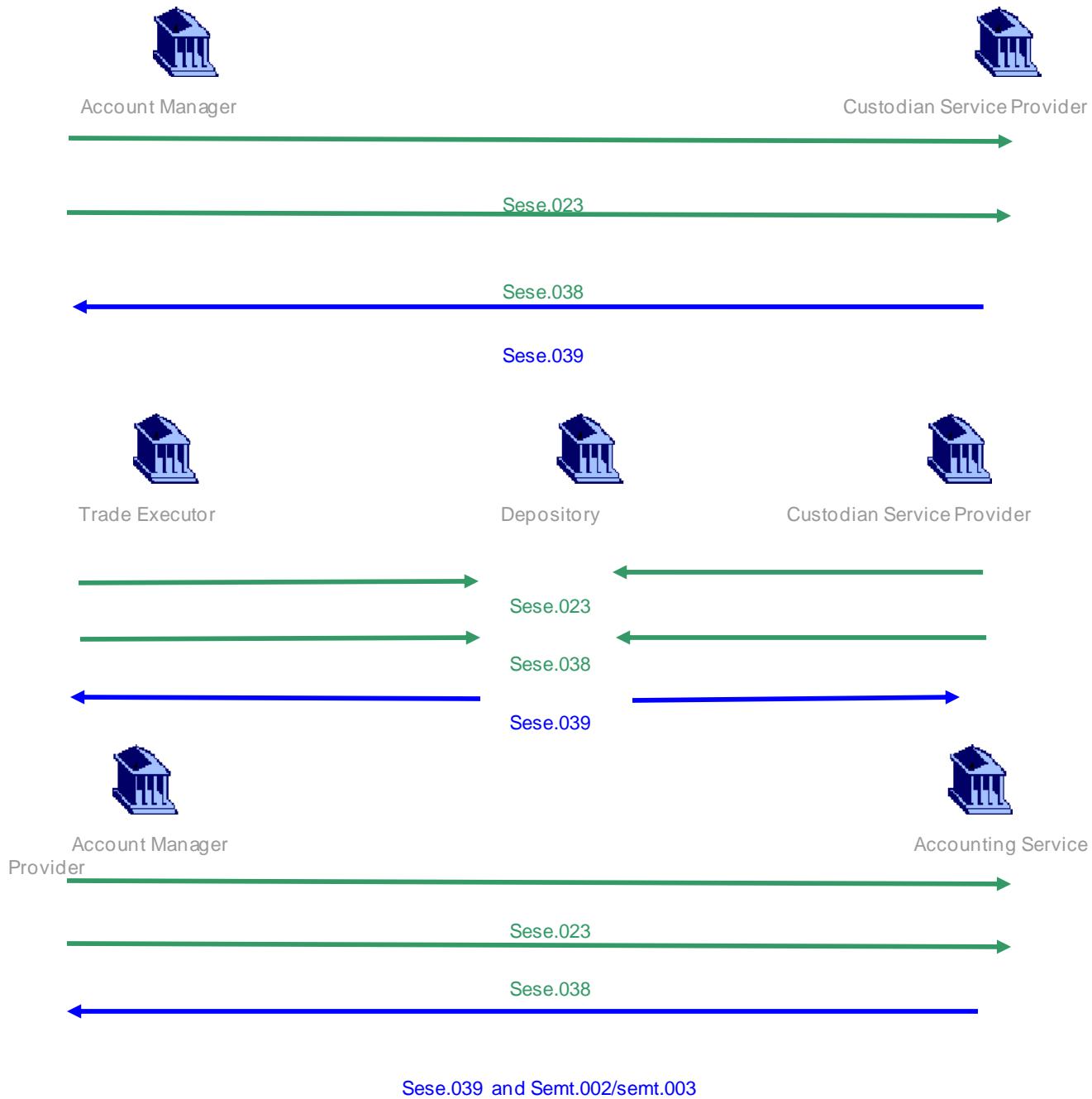
F. Factor Update Example Rebook DTC – Post Settlement (MT 543)

:16R:GENL
:20C::SEME//REBOOK
:23G:NEWM
:16R:LINK
:20C::PREV//ORIGINAL TRADE
:16S:LINK
:16S:GENL
:16R:TRADDET
:98A::SETT//20070308
:98A::TRAD//20070305
:90A::DEAL//PRCT/104,500000000
:35B:ISIN US1234567891
CORPORATE BOND
:16R:FIA
:98A::MATU//20181215
:98A::ISSU//19990302
:92A::INTR//7,41600000
:92A::CUFC//0,60000000
:16S:FIA
:16S:TRADDET
:16R:FIAC
:36B ::SETT//FAMT//100000,0000
:36B::SETT//AMOR/60000,0000
:97A::SAFE//TEST ACCOUNT
:16S:FIAC
:16R:SETDET
:22F::SETR//FCTA
:16R:SETPRTY
:95P::PSET//DTCYUS33
:16S:SETPRTY
:16R:SETPRTY
:95R::REAG/DTCYID/00001234
:16S:SETPRTY
:16R:SETPRTY
:95R::BUYR/DTCYID/0000124
:16S:SETPRTY
:16R:CSHPRTY
:95P ::PAYE/BICXXXXX If not available, then :95Q::PAYE
:16S:CSHPRTY
:16R:CSHPRTY
:95P::DEBT//BICXXXXX
If not available, then 95Q::DEBT If not available, then 95Q::DEBT
:16S:CSHPRTY
:16R:AMT
:19A::SETT//USD63938,75
:16S:AMT
:16R:AMT
:19A::DEAL//USD62700,00

:16S:AMT
:16R:AMT
:19A::ACRU//USD1238,75
:16S:AMT
:16R:AMT
:19A::ANTO//NUS D13010.25
:16S:AMT
:16S:SETDET

IX. ISO 20022 illustration:

Post Settlement scenario



Data	ISO 20022
Instruction Identification	TxId/35x
Trade Date	TradDtIs/TradDt/Dt/Dt/ISODate
Settlement Date	TradDtIs/SttlmDt/Dt/Dt/ISODate
Quantity of Financial Instrument	QtyAndAcctDtIs/SttlmQty/Qty/Unit or FaceAmount or Amortised Value

	*Instrument type will determine quantity type code.
Financial Instrument	FinInstrmId/ISIN
Settlement Amount	SttlmAmt/Amt
Safekeeping Account to be credited or debited	QtyAndAcctDtls/SfkpgAcct
Place of Settlement	DlvrgrSttlmPties/Dpstry/Id/ AnyBIC RcvgrSttlmPties/ Dpstry/Id/ AnyBIC
Receiving/Delivering Agent	DlvrgrSttlmPties/Party1/Id/ Any BIC or Prop Id RcvgrSttlmPties/Party1/Id/ Any BIC or Prop Id
Receiving/Delivering Party	DlvrgrSttlmPties/Party2/Id/ Any BIC or Prop Id or Name and Address RcvgrSttlmPties/Party2/ Any BIC or Prop Id or Name and Address
Client of Receiving/Delivering Agent	If the party 2 is not the direct client of the delivering agent (party 1), then an intermediary (party 3) must also be provided.

X. Message Usage Rules:

Linkers/TIPs

The Original Face or Units and Current Face should be provided.

The use of FinInstrmAttrbts/ IndxRateBsis is recommended as mandatory for Linkers/Tips

Mortgage / Asset Backed Securities – Factor Updates

The Original Face and Current Face should both be provided, even if the factor is equal to one.

When trading factored securities, the current factor is not always known at the time of the trade, even though this current factor may be effective. When this is the case, the market convention is to initially settle the trade with the previous or most current known factor and then adjust for the difference when the current factor becomes available. It is the net amount of the trade that needs to be adjusted due to the updated factor:

Original face * current factor = current face

Current face * trade price +/- interest = net amount of trade

Bond Agreement with Sinking Fund Provisions:

The Original Face and Current Face should both be provided, even if the factor is equal to one.

Any bond issue that is backed by a sinking fund provision to lessen interest rate and default risk by setting aside a pool of funds to repurchase a portion of the existing bond/debt. Ultimately, resulting in a smaller final repayment at maturity. Most commonly applied to corporate bonds, but also can apply to other bond agreements such as Municipal Bonds (MUNIs) and Collateralized Mortgage Obligations (CMOs).

Pre-settlement

For the scenario in which the “current” factor becomes known on or prior to contractual settlement, the normal cancel (sese.020) and rebook process (a new sese.023) should be followed. In this case, the Account

Manager will cancel the trade and send across new trade and settlement instructions. This new trade will have the new current factor and additionally reflect the new net amount. No special processing by the

Custodian Service Provider is required, and no special (post settlement) factor update identifiers should be used.

Post-settlement

The more complex scenario is in which the current factor does not become known until after contractual settlement of the trade, in this case, specific processing is required since the securities (the trade) would have already settled.

Once a trade has been settled is not able to be cancelled, therefore the normal cancel and rebook messages are not appropriate.

In this scenario, the original face amount of the trade has been settled correctly, but because of the recent factor update, the net amount of money associated with the trade is incorrect, and needs to be adjusted. Because of this, the Account Manager will send a modification message with the new factor using the Securities Settlement Transaction Modification Request message (sese.038) and optionally the Status advice (sese.039).

The following additional business elements are required to be included in modification instruction (sese.038) for post settlement factor updates:

- 1) Qualifier to indicate that the modification is for a factor update
- 2) Reference number to link the modification instruction (which include the new factor) to the original instruction (which reflected the old factor)
- 3) The modification instruction also needs to include the instructions to move cash, reflective of the difference in the net amount of the trade.

Note: A factor adjustment is not a corporate event.

Messaging Sequence

1. Send a modification of the original trade using sese.038
 - a. Identify the modification as a Factor Update (*ModfdTxDtls/SctiesTxTp/Cd/FCTA*). This allows the receiving party to know you are providing,a modified instruction with a factor.
 - b. Include a link to the original trade that has settled, so the receiving party can adjust their records appropriately, using the element Modified Transaction Details/ Account Owner Transaction Identification (*UpdTp/Mod/SttlmParams/ModfdTxDtls/AcctOwnrTxId*).
 - c. Identify the direction of cash movement as a gain or loss using fields Settlement Amount (*SttlmAmt*) and Credit Debit Indicator (*CdtDbtInd*)
 - d. On **Delivery**: Provide an occurrence of the cash party sequence to provide instructions:
 - i. Of where to pay the cash difference using field Creditor Agent BIC (*CshPties/CdtrAgt/BICFI*)
If the trade originally settled DTCC, then you will be using an SPO charge as proprietary identification
If the trade originally settled Fedwire, then you will be using ABA Number as proprietary identification
 - ii. On the Creditor BIC (*CshPties/Cdtr/AnyB/C*) or if not available then Creditor Name (*CshPties/Cdtr/NmAndAdr/Nm*) with the Cash Account (*CshPties/CshAcct*)

- g. On **Receipt**: Provide an occurrence of the cash party sequence to provide instructions:
- i. On the Paying Institution BIC (*CshPties/DbtrAgt/BICFI*), or if not available then Debtor Agent Name (*CshPties/DbtrAgt/DbtrAgtNmAndAdr*)
 - ii. If required, include the underlying ordering client (*CshPties/Dbtr/AnyBIC*) or if not available then Debtor Name (*CshPties/Dbtr/NmAndAdr/Nm*).
- h. Intermediary Institution (*CshPties/Intrmy*) is optionally allowed on both the delivery and receipt cash party sequence if applicable.

Below are examples of the Cash Party Sequence for both payments and receipts respectively

DTCC SPO Charge Debit

```
<CshPties>
  <CdtrAgt>
    <Id>
      <PrtryId>
        <Id>0000000</Id>                               Clearing Party on behalf of beneficiary
        <Issr>DTCYId</Issr>
      </PrtryId>
    </Id>
  </CdtrAgt>
  <Cdtr>
    <Id>
      <AnyBIC>BICAUS33</AnyBIC>                  Beneficiary BIC or Name
    </Id>
    <CshAcct>
      <Prtry>XYZZY</Prtry>                         Cash Account of Beneficiary
    </CshAcct>
  </Cdtr>
  <Intrmy>
    <Id>
      <BICFI>BICAUS33</BICFI>                  Intermediary
    </Id>
  </Intrmy>
</CshPties>
```

Fedwire Delivery

```
<CshPties>
  < CdtrAgt>
    <Id>
      <PrtryId>
        <Id>XXXXXXXXXX</Id>                           Clearing Party on behalf of beneficiary
        <Issr>USFW</Issr>
      </PrtryId>
```

</Id>

```

</CdtrAgt>
<Cdr>
  <Id>
    <AnyBIC>BICAUS33</AnyBIC>      Beneficiary BIC or Name
  </Id>
  <CshAcct>
    <Prtry>XYZZY</Prtry>          Cash Account of Beneficiary
  </CshAcct>
</Cdr>
<Intrmy>
  <Id>
    <BICFI>BICAUS33</BICFI>      Intermediary
  </Id>
</Intrmy>
</CshPties>

```

Fedwire Receipt or DTCC SPO Charge Credit

```

<CshPties>
  <DbtrAgt>
    <Id>
      <BICFI>BICAUS33</BICFI>      Paying Institution
    </Id>
  </DbtrAgt>
  <Dbtr>
    <NmAndAdr>DebtorNameAndAddress
    <NmAndAdr>
  </Dbtr>
  <Intrmy>
    <Id>
      <BICFI>BICAUS33</BICFI>
    </Id>
  </Intrmy>
</CshPties>

```

ADDITIONAL NOTE:

In sequences *QuantityAndAccountDetails* and *CashParties*, for field *CashAccount*, when IBAN is used (*either though mandate or otherwise*) then this format should be used.

Sample Message Formats:

A. Linker/TIPS Factored Security

```
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:sese.023.001.06">
  <SctiesStlmTxInstr>
    <TxId>12345TIPS</TxId>
    <StlmTpAndAddtlParams>
      <SctiesMvmntTp>RECE</SctiesMvmntTp>
      <Pmt>APMT</Pmt>
    </StlmTpAndAddtlParams>
    <TradDtls>
      <TradDt>
        <Dt>
          <Dt>2007-01-18</Dt>
        </Dt>
      </TradDt>
      <StlmDt>
        <Dt>
          <Dt>2007-01-17</Dt>
        </Dt>
      </StlmDt>
      <DealPric>
        <Tp>
          <ValTp>PARV</ValTp>
        </Tp>
        <Val>
          <Rate>99.121093750</Rate>
        </Val>
      </DealPric>
    </TradDtls>
    <FinInstrmId>
      <ISIN>US1234567891</ISIN>
      <Desc>TREASURY (CPI) NOTE</Desc>
    </FinInstrmId>
    <FinInstrmAttrbts>
      <MtrtyDt>2017-01-15</MtrtyDt>
      <IsseDt>2007-01-16</IsseDt>
      <IntrstRate>2.37500000</IntrstRate>
      <IdxRateBsis>0.99986000</IdxRateBsis>
    </FinInstrmAttrbts>
    <QtyAndAcctDtls>
      <StlmQty>
        <OrgnlAndCurFace>
          <FaceAmt>5440000</FaceAmt>
          <AmtsdVal>5439238.4000</AmtsdVal>
        </OrgnlAndCurFace>
```

```
</StlmQty>
<SfkpgAcct>
  <Id>TEST
  ACCOUNT</I
  d>
</SfkpgAcct>
</QtyAndAcctDtls>
<StlmParams>
  <SctiesTxTp>
    <Cd>TRAD</
    Cd>
  </SctiesTxTp>
</StlmParams>
<DlvrgrgStlmPties>
  <Dpstry>
    <Id>
<AnyBIC>FRNYUS3
  3</AnyBIC>
    </Id>
  </Dpstry>
  <Pty1>
    <Id>
      <PrtryId>
        <Id>000001234</Id>
<Issr>USFW </Issr>
      <PrtryId>
        <Id>
          <SfkpgAcct>
            <Id>TSY</I
            d>
          </SfkpgAcct>
        </Pty1>
        <Pty2>
          <Id>
            <PrtryId>
              <Id>00001234 </Id>
<Issr>DTCYID </Issr>
            <PrtryId>
              <Id>
                <Pty2>
                  </Pty2>
                </DlvrgrgStlmPties>
                <StlmAmt>
                  <Amt
                    Ccy="USD">539
                    2503.16</Amt>
                  <CdtDbtInd>DB
                    IT</CdtDbtInd>
```

```
</SttlmAmt>
<OthrAmts>
  <AcrdIntrstAmt>
    <Amt
      Ccy="USD">
      1070.57</Amt
    >
  </AcrdIntrstAmt>
  >
  <TradAmt>
    <Amt
      Ccy="USD">5
      391432.59</A
      mt>

    </TradAmt>
  </OthrAmts>
</SctiesSttlmTxInstr>
</Document>
```

B. CORPORATE w/ SINKING FUND

```
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:sese.023.001.06">
  <SctiesStlmtxInstr>
    <TxId>12345SINK</TxId>
    <StlmtpAndAddtlParams>
      <SctiesMvmntTp>DELI</SctiesMvmntTp>
      <Pmt>APMT</Pmt>
    </StlmtpAndAddtlParams>
    <TradDtls>
      <TradDt>
        <Dt>
          <Dt>2007-03-05</Dt>
        </Dt>
      </TradDt>
      <Stlmt>
        <Dt>
          <Dt>2007-03-05</Dt>
        </Dt>
      </Stlmt>
    <DealPric>
      <Tp>
        <ValTp>PARV</ValTp>
      </Tp>
      <Val>
        <Rate>104.50000000</Rate>
      </Val>
    </DealPric>
    <TradDtls>
      <FinInstrmId>
        <ISIN>US1234567891</ISIN>
        <Desc>CORPORATE BOND</Desc>
      </FinInstrmId>
      <FinInstrmAttrbts>
        <MrtryDt>2018-12-15</MrtryDt>
        <IsseDt>1999-03-02</IsseDt>
        <CurFctr>0.72450000</CurFctr>
        <IntrstRate>7.41600000</IntrstRate>
      </FinInstrmAttrbts>
      <QtyAndAcctDtls>
        <StlmtQty>
          <OrgnlAndCurFace>
            <FaceAmt>100000.0000</FaceAmt>
            <AmtsdVal>72450.0000</AmtsdVal>
          </OrgnlAndCurFace>
        </StlmtQty>
```

<SfkpgAcct>

```

<Id>TEST ACCOUNT</Id>
</SfkpgAcc>
</QtyAndAcctDtls>
<StlmtParams>
<SctiesTxTp>
<Cd>TRAD</Cd>
</SctiesTxTp>
</StlmtParams>
<RcvgStlmtPties>
<Dpstry>
<Id>
<AnyBIC>DTCYUS33</AnyBIC>
</Id>
</Dpstry>
<Pty1>
<Id>
<PrtryId>
<Id>00001234</Id>
<Issr>DTCYID</Issr>
</PrtryId>
</Id>
</Pty1>
<Pty2>
<Id>
<PrtryId>
<Id>0000124</Id>
<Issr>DTCYID</Issr>
</PrtryId>
</Id>
</Pty2>
</RcvgStlmtPties>
<StlmtAmt>
<Amt Ccy="USD">76949.0</Amt>
<CdtDbtInd>CRDT</CdtDbtInd>
</StlmtAmt>
<OthrAmts>
<AcrdIntrstAmt>
<Amt Ccy="USD">1238.75</Amt>
</AcrdIntrstAmt>
<TradAmt>
<Amt Ccy="USD">75710.25</Amt>
</TradAmt>
</OthrAmts>
</SctiesStlmtTxInstr>
</Document>

```

C.MBS Factored Security

```
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:sese.023.001.06">
  <SctiesStlM TxInstr>
    <TxId>12345MBS</TxId>
    <StlM TpAndAddtlParams>
      <SctiesMvmntTp>DELI</SctiesMvmntTp>
      <Pmt>APMT</Pmt>
    </StlM TpAndAddtlParams>
    <TradDtls>
      <TradDt>
        <Dt>
          <Dt>2006-09-18</Dt>
        </Dt>
      </TradDt>
      <StlM Dt>
        <Dt>
          <Dt>2006-09-20</Dt>
        </Dt>
      </StlM Dt>
    <DealPric>
      <Tp>
        <ValTp>PARV</ValTp>
      </Tp>
      <Val>
        <Rate>100.816406250</Rate>
      </Val>
    </DealPric>
  </TradDtls>
  <FinInstrmId>
    <ISIN>US1234567891</ISIN>
    <Desc>GNMA 30YR</Desc>
  </FinInstrmId>
  <FinInstrmAttrbts>
    <MtrtyDt>2034-10-15</MtrtyDt>
    <IsseDt>2004-10-01</IsseDt>
    <CurFctr>0.73336721</CurFctr>
    <IntrstRate>6.00000000</IntrstRate>
  </FinInstrmAttrbts>
  <Qty And AcctDtls>
    <StlM Qty>
      <OrgnlAndCurFace>
```

```
<FaceAmt>161735.3400</FaceAmt>
<AmtsdVal>220538.0000</AmtsdVal>
</OrgnlAndCurFace>
</StlmQty>
<SfkpgAcct>
<Id>TEST ACCOUNT</Id>
</SfkpgAcct>
</QtyAndAcctDtls>
<StlmParams>
<SctiesTxTp>
<Cd>TRAD</Cd>
</SctiesTxTp>
</StlmParams>
<RcvgStlmPties>
<Dpstry>
<Id>
<AnyBIC>FRNYUS33</AnyBIC>
</Id>
</Dpstry>
<Pty1>
<Id>
<PrtryId>
<Id>00001234</Id>
<Issr>USFW</Issr>
</PrtryId>
</Id>
<SfkpgAcct>
<Id>MBS</Id>
</SfkpgAcct>
</Pty1>
<Pty2>
<Id>
<PrtryId>
<Id>00001234</Id>
<Issr>DTCYID</Issr>
</PrtryId>
</Id>
</Pty2>
</RcvgStlmPties>
<StlmAmt>
<Amt Ccy="USD">163567.92</Amt>
<CdtDbtInd>CRDT</CdtDbtInd>
</StlmAmt>
<OthrAmts>
<AcrdIntrstAmt>
```

<Amt Ccy="USD">512.16</Amt>

```

</AcrdIntrstAmt>
<TradAmt>
    <Amt Ccy="USD">163055.76</Amt>
</TradAmt>
</OthrAmts>
</SctiesStlmtxInstr>
</Document>

```

D. Factor Update Example Cancel - Post Settlement

No cancel will be done in ISO 20022 but a modification instruction will be sent.

E. Factor Update Example Rebook Fedwire – Post Settlement

```

<Document xmlns="urn:iso:std:iso:20022:tech:xsd:sese.038.001.04">
    <SctiesStlmtxModReq>
        <ModfdTxDtls>
            <AcctOwnrTxId>
                <TxId>ORIGINAL TRADE</TxId>
                <SctiesMvmntTp>RECE</SctiesMvmntTp>
                <Pmt>APMT</Pmt>
            </AcctOwnrTxId>
            <SfkpgAcct>
                <Id>TEST</Id>
            </SfkpgAcct>
        </ModfdTxDtls>
        <UpdTp>
            <Mod>
                <StlmtpAndAddtlParams>
                    <SctiesMvmntTp>RECE</SctiesMvmntTp>
                    <Pmt>APMT</Pmt>
                </StlmtpAndAddtlParams>
                <FinInstrmId>
                    <ISIN>US1234567891</ISIN>
                    <Desc>FGOLD 30YR GIANT</Desc>
                </FinInstrmId>
                <StlmtParams>
                    <SctiesTxTp>
                        <Cd>FCTA</Cd>
                    </SctiesTxTp>
                </StlmtParams>
                <CshPties>
                    <Dbtr>
                        <Id>
```

<AnyBIC>BICAUS33XXX</AnyBIC>

```
</Id>
<CshAcct>
  <Prtry>00000000</Prtry>
</CshAcct>
</Dbdtr>
<DbtrAgt>
  <Id>
    <PrtryId>
      <Id>00000000</Id>
      <Issr>USFW</Issr>
    </PrtryId>
  </Id>
</DbtrAgt>
</CshPties>
</Mod>
</UpdTp>
</SctiesStlmTxModReq>
</Document>
```

F. Factor Update Example Rebook DTC – Post Settlement

```
<Document
xmlns="urn:iso:std:iso:20022:tech:xsd:sese.038.001.04">
<SctiesStlmTxModReq>
<ModfdTxDtls>
<AcctOwnrTxId>
<TxId>ORIGINAL TRADE</TxId>
<SctiesMvmntTp>RECE</SctiesMvmntTp>
<Pmt>APMT</Pmt>
</AcctOwnrTxId>
<SfkpgAcct>
<Id>TEST ACCOUNT</Id>
</SfkpgAcct>
</ModfdTxDtls>
<UpdTp>
<Mod>
<StlmTpAndAddtlParams>
<SctiesMvmntTp>RECE</SctiesMvmntTp>
<Pmt>APMT</Pmt>
</StlmTpAndAddtlParams>
<FinInstrmId>
<ISIN>US1234567891</ISIN>
<Desc>CORPORATE BOND</Desc>
</FinInstrmId>
<StlmParams>
<SctiesTxTp>
<Cd>FCTA</Cd>
</SctiesTxTp>
</StlmParams>
<CshPties>
<Dbtr>
<Id>
<AnyBIC>BICAUS33XXX</AnyBIC>
</Id>
<CshAcct>
<Prtry>00000000</Prtry>
</CshAcct>
</Dbtr>
<DbtrAgt>
<Id>
<PrtryId>
<Id>DTC Identifier</Id>
<Issr>DTCYID</Issr>
</PrtryId>
```

```
</Id>
</DbtrAgt>
</CshPties>
</Mod>
</UpdTp>
</SctiesStlmTxModReq>
</Document>
```