



**THE FOUNDATION  
FOR SECURE  
MARKETS**

ENCORE – Data Distribution Services Guide  
For Stock Loan

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## Document Organization

This guide provides the FIXML elements, transmission layouts, message structures, samples, and Data Service mappings for each Stock Loan transmission.

The following transmissions are defined in this guide:

- Stock Loan Trades
- Stock Loan Transmission and Mark To Market Report
- Stock Loan Adjusted Position Report
- Eligible Securities Report

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## Glossary of Terms

You should be familiar with the following terms prior to reading this guide.

**Batch** – In a computer, a batch job is a program that is assigned to the computer to run without further user interaction. In larger commercial computers or servers, batch jobs are usually initiated by a system user. Some are defined to run automatically at a certain time.

**DDS (Data Distribution Services)** —DDS supports both batch and real-time data delivery and utilizes the FIXML data formatting standard.

**ENCORE** – The clearing system at OCC.

**Event-Driven Processing** – A business event is a meaningful change in the state of the enterprise, such as the opening of a new customer account, clearing a trade, or the matching of a transfer. Event-driven processing is system behavior that is initiated by these business events rather than system events—such as time-based scheduling. Event-driven systems possess the following attributes: 1) Individual treatment of transactions; 2) Push delivery systems; and 3) Electronic notification.

**FIXML (Financial Information eXchange Markup Language)** – The XML derived grammar of the FIX protocol. A FIXML implementation will have message format validation, cleaner, more expressive structure, and leverage existing standards. The initial goal is to provide the ability to embed FIXML messages within traditional FIX header and trailers to minimize the impact on existing implementations.

**Messaging** – There are two major messaging server models: The point-to-point model and the publish/subscribe model. Messaging allows programs to share common message-handling code, to isolate resources and interdependencies, and to easily handle an increase in message volume. Messaging also makes it easier for programs to communicate across different programming environments (languages, compilers, and operating systems) since the only thing that each environment needs to understand is the common messaging format and protocol.

**Package** – A Package is a collection of DDS transmissions that are grouped together based on selections made when the subscription was created.

**Pull Delivery Model** – In this information delivery model, the observer—or client—requests information from the information owner. An example of this model is the download of a document from a web page.

**Push Delivery Model** – In this information delivery model, the information owner distributes the data to the observer as it deems appropriate. An example of this model is the sending and delivery of an email message.

**Real-Time** – A level of computer responsiveness that a user senses as sufficiently immediate or that enables the computer to keep up with some external process (for example, to present trade data as trades are executed and cleared). *Real-time* is an adjective pertaining to computers or processes that operate in real-time. Real-time describes a human rather than a machine sense of time.

**Recipient** – The entity (Clearing Member Organization, Exchange, Regulatory Agency or Service Bureau) that owns the systems where DDS delivers data for processing or retransmission.

**STP (Straight-Through-Processing)** – The seamless integration of systems and processes to automate the trade process from end-to-end--trade execution, confirmation and settlement--without the need for manual intervention or the re-keying of data.

**Subscriber** – The entity (a Clearing Member Organization, Exchange, or Regulatory Agency) that requests a package of transmissions and owns the data that is transmitted to recipients.

**XML (eXtensible Markup Language)** – A simple and flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere. Special purpose XML languages and standards are commonly developed with several hundred already adopted since XML 1.0 was released in February 1998.

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## TRANSMISSIONS

### ENCORE Transmission: Stock Loan Trades

FIX Message:	Trade Capture Report
Subscription Options:	Equity
Delivery Options:	Real-Time or Batch File

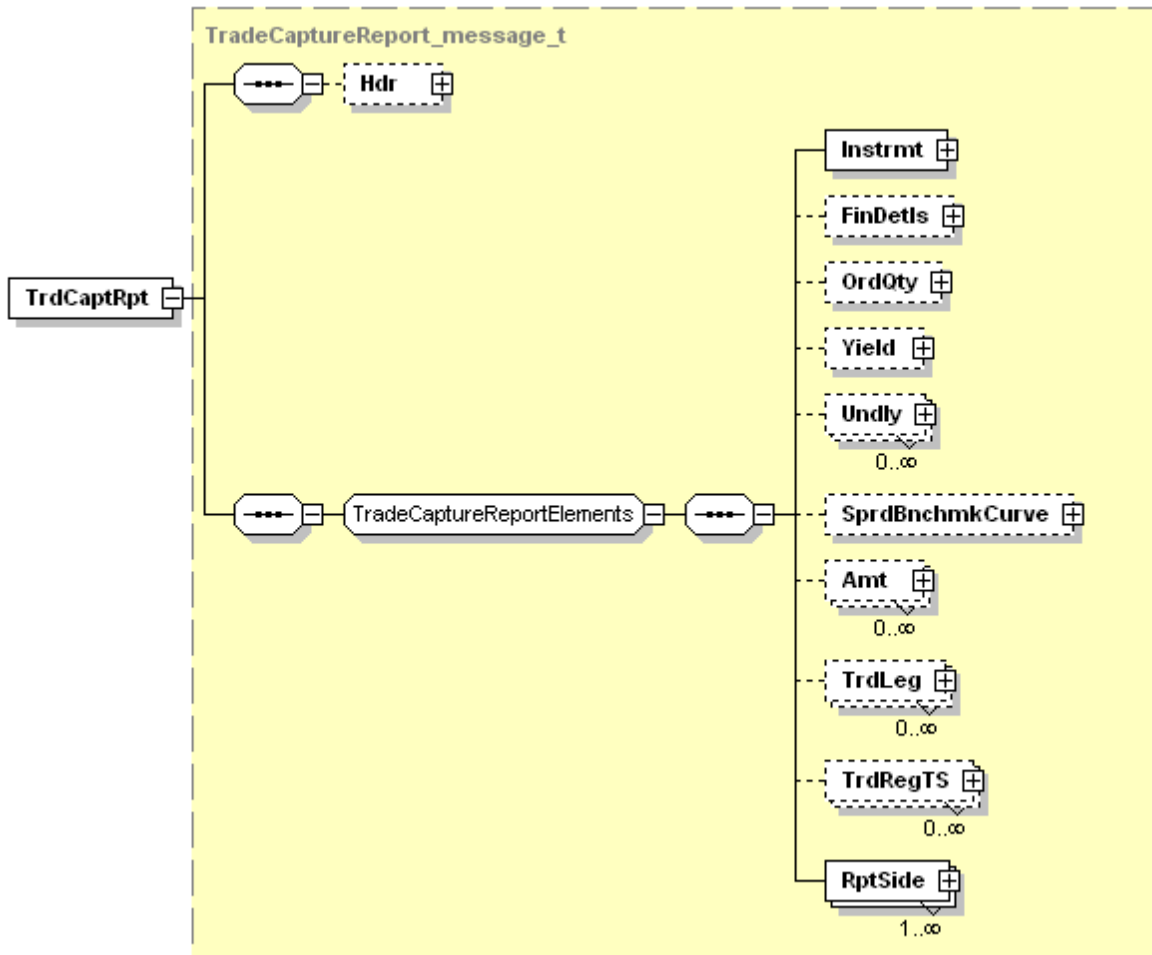
#### Overview

Trade Capture Report messages will be sent for each processed and applied New Loan and Return/Recall transaction for both the AQS and the bilateral stock loan programs.

Every time that a bilateral stock loan transaction settles at DTCC and clears at OCC, a Trade Capture Report message will be created. Likewise, every time an AQS stock loan transaction clears from AQS to OCC and settles at DTCC, a Trade Capture Report message will be created. Similarly, a Trade Capture Report message will be sent after processing a reclaim of a new loan or a reclaim of a return. Real-Time subscribers will receive these messages immediately and Batch subscribers will receive these messages at the end of the day in a batch file.

The end of day message sent to real-time subscribers serves as an indication that no more Stock Loan Trade Capture Report messages will be sent for that business day.

## Message Structure



Message Layout – Trade Capture Report – Stock Loan Trades to OCC Clearing Members

Trade Capture Report – Stock Loan Trades to OCC Clearing Members								
FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	TrdCaptRpt							
571					RptID	Unique Identifier for the Message	String	450391670
1003					TrdID	Unique Identifier for the Trade	String	123456789
75					TrdDt	As Of Date	LocalMkt Date	2010-06-08
60					TxnTm	Trade Time	UTCTimest amp	2010-06-08T12:00:00
715					BizDt	Clearing Business Date	LocalMkt Date	2010-06-08
487					TransTyp	Trade Report Transaction Type 0 = New 1 = Reclaim	Int	0
828					TrdTyp	Trade Type 0 = Regular Trade	Int	0
32					LastQty	Processed Quantity	Qty	100
31					LastPx	Processed Marking Price	Price	30
	➔	Instrmt						
55					Sym	Symbol	String	IBM
48					ID	CUSIP	String	459200101
22					Src	ID Source 1 = CUSIP	String	1
460					Prod	Product Type 5 = Equity	Integer	5
207					Exch	Trade Source (MIC) XAQS = AQS OOTC = bilateral OCC Stock Loan	Exchange	OOTC
	➔	/Instrmt						
	➔	Amt						
708					Amt	Settlement Value of Loan/Borrow	Amount	3,000
707					Typ	Type of Amount SETL = Settlement Value	String	SETL
	➔	/Amt						



## Trade Capture Report – Stock Loan Trades to OCC Clearing Members

FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	RptSide						
54					Side	F = Lend G = Borrow	Char	F
77					PosEfct	Open Close Code O = Open (New Loan/Borrow) C = Close (Return/Recall)	Char	O
1005					RptID	Exchange Trade Reference	String	457_DGGED_6547
	→	→	Pty					
448					ID	Clearing Group Name	String	OCC
452					R	Party Role 21 = Clearing Organization	Int	21
	→	→	/Pty					
	→	→	Pty					
448					ID	Clearing Member Number	String	00549
452					R	Party Role 4 = Clearing Firm	Int	4
	→	→	→	Sub				
523					ID	Account Type	String	F
803					Typ	26 = Position Account Type (C/F/M)	Int	26
	→	→	→	/Sub				
	→	→	→	Sub				
523					ID	DTCC Participant Number	String	0549
803					Typ	17 = DTCC Participant Number	Int	17
	→	→	→	/Sub				
	→	→	/Pty					
	→	→	Pty					
448					ID	Executing Broker	String	TBH
452					R	Party Role 2 = Executing Broker (NCM)	Int	2
	→	→	/Pty					
	→	→	Pty					
448					ID	Sub Account Acronym	String	MGS

## Trade Capture Report – Stock Loan Trades to OCC Clearing Members

FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
452					R	Party Role 38 = Sub Account	Int	38
	→	→	/Pty					
	→	→	Pty					
448					ID	Customer Account	String	1Z0730
452					R	Party Role 24 = Customer Account	Int	24
	→	→	/Pty					
	→		/RptSide					
	→		RptSide					
54					Side	F = Lend G = Borrow	Char	G
77					PosEfct	Open Close Code O = Open (New Loan/Borrow) C = Close (Return/Recall)	Char	O
1005					RptID	Exchange Trade Reference	String	457_DGGED_6547
	→	→	Pty					
448					ID	Clearing Group Name	String	OCC
452					R	Party Role 21 = Clearing Organization	Int	21
	→	→	/Pty					
	→	→	Pty					
448					ID	Clearing Member Number	String	00164
452					R	4 = Clearing Firm	Int	4
	→	→	→	Sub				
523					ID	Account Type	String	C
803					Typ	26 = Position Account Type (C/F/M)	Int	26
	→	→	→	/Sub				
	→	→	→	Sub				
523					ID	DTCC Participant Number	String	0164
803					Typ	17 = DTCC Participant Number	Int	17
	→	→	→	/Sub				
	→	→	/Pty					

## Trade Capture Report – Stock Loan Trades to OCC Clearing Members

FIX Mapping						Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	→	Pty					
448					ID	Executing Broker	String	902T
452					R	2 = Executing Broker (NCM)	Int	2
	→	→	/Pty					
	→	→	Pty					
448					ID	Sub Account Acronym	String	XXX
452					R	Party Role 38 = Sub Account	Int	38
	→	→	/Pty					
	→	→	Pty					
448					ID	Customer Account	String	FSAD1564-654
452					R	Party Role 24 = Customer Account	Int	24
	→	→	/Pty					
	→	→	/RptSide					
	→	→	/TrdCaptRpt					

## Sample Message – Stock Loan Trade (New Loan) – Bilateral

The bilateral trade capture message below is showing clearing member 00549 opening a new loan of 100 shares in CUSIP 459200101 with contra party 00164 for a settlement value of \$3,000.

<TrdCaptRpt	
RptID="450391670"	Unique Identifier for the Message
TrdID="123456789"	Unique Identifier for the Trade
TrdDt="2010-12-02"	As of Date
TxnTm="2010-12-02T17:58:15"	Trade Time
BizDt="2010-12-02"	Clearing Business Date
TransTyp="0"	0 = New trade
TrdTyp="0"	0 = Regular Trade
LastQty="100"	Quantity
LastPx="30">	Price
<Instrmt	
Sym="IBM"	Symbol
ID="459200101"	CUSIP
Src="1"	1 = CUSIP
Prod="5"	5 = Equity
Exch="OOTC">	OOTC = OCC Bilateral
</Instrmt>	
<Amt	
Amt="3000"	Settlement Value of Loan/Borrow
Typ="SETL">	SETL = Settlement Value
</Amt>	
<RptSide	
Side="F"	F = Lender
PosEfct="O"	O = New Loan
RptID="457_DGGED_6547">	Exchange Trade Reference
<Pty ID="OCC" R="21"/>	Clearing Group Name
<Pty ID="00549" R="4">	Clearing Member Number
<Sub ID="F" Typ="26"/>	Account Type
<Sub ID="0549" Typ="17"/>	DTCC Participant ID
</Pty>	
<Pty ID="TBH" R="2"/>	Executing Broker
<Pty ID="MGS" R="38"/>	Sub-Account
<Pty ID="1Z0730" R="24"/>	Optional Customer Account Identifier
</RptSide>	
<RptSide	
Side="G"	G = Borrower
PosEfct="O"	O = New Loan
RptID="457_DGGED_6547">	Exchange Trade Reference
<Pty ID="OCC" R="21"/>	Clearing Group Name
<Pty ID="00164" R="4">	Clearing Member Number
<Sub ID="C" Typ="26"/>	Account Type
<Sub ID="0164" Typ="17"/>	DTCC Participant ID
</Pty>	
<Pty ID="902T" R="2"/>	Executing Broker
</RptSide>	
</TrdCaptRpt>	

## Sample Message – Stock Loan Trade (Reclaimed New Loan) – Bilateral

The bilateral trade capture message below is showing clearing member 00549 reclaiming a new loan of 100 shares in CUSIP 459200101 with contra party 00164 for a settlement value of \$3,000.

```
<TrdCaptRpt
  RptID="450391679"           Unique Identifier for the Message
  TrdID="123456789"           Unique Identifier for the Trade
  TrdDt="2010-12-02"          As of Date
  TxnTm="2010-12-02T18:18:15" Trade Time
  BizDt="2010-12-02"          Clearing Business Date
  TransTyp="1"                 1 = Reclaimed trade
  TrdTyp="0"                   0 = Regular Trade
  LastQty="100"                Quantity
  LastPx="30"                  Price
<Instrmt
  Sym="IBM"                     Symbol
  ID="459200101"                CUSIP
  Src="1"                        1 = CUSIP
  Prod="5"                       5 = Equity
  Exch="OOTC"                    OOTC = OCC Bilateral
</Instrmt>
<Amt
  Amt="3000"                     Settlement Value of Loan/Borrow
  Typ="SETL"                       SETL = Settlement Value
</Amt>
<RptSide
  Side="F"                         F = Lender
  PosEfct="O"                       O = New Loan
  RptID="457_DGGED_6547">        Exchange Trade Reference
  <Pty ID="OCC" R="21"/>          Clearing Group Name
  <Pty ID="00549" R="4">          Clearing Member Number
    <Sub ID="F" Typ="26"/>        Account Type
    <Sub ID="0549" Typ="17"/>    DTCC Participant ID
  </Pty>
  <Pty ID="TBH" R="2"/>          Executing Broker
  <Pty ID="MGS" R="38"/>         Sub-Account
  <Pty ID="1Z0730" R="24"/>     Optional Customer Account Identifier
</RptSide>
<RptSide
  Side="G"                         G = Borrower
  PosEfct="O"                       O = New Loan
  RptID="457_DGGED_6547">        Exchange Trade Reference
  <Pty ID="OCC" R="21"/>          Clearing Group Name
  <Pty ID="00164" R="4">          Clearing Member Number
    <Sub ID="C" Typ="26"/>        Account Type
    <Sub ID="0164" Typ="17"/>    DTCC Participant ID
  </Pty>
  <Pty ID="902T" R="2"/>         Executing Broker
</RptSide>
</TrdCaptRpt>
```

## Sample Message – Stock Loan Trade (Return)

The AQS trade capture message below is showing clearing member 00608 returning a loan of 2,000 shares in CUSIP 459200101 for a settlement value of \$326,000 with OCC '982' as the contra party.

```
<TrdCaptRpt
  RptID="000116789"           Unique Identifier for the Message
  TrdID="7689333"            Unique Identifier for the Trade
  TrdDt="2010-12-02"         As of Date
  TxnTm="2010-12-02T17:58:15" Trade Time
  BizDt="2010-12-02"         Clearing Business Date
  TransTyp="0"               0 = New trade
  TrdTyp="0"                 0 = Regular Trade
  LastQty="2000"             Quantity
  LastPx="163">            Price
<Instrmt
  Sym="IBM"                   Symbol
  ID="459200101"             CUSIP
  Src="1"                     1 = CUSIP
  Prod="5"                    5 = Equity
  Exch="XAQS">              XAQS = AQS
</Instrmt>
<Amt
  Amt="326000"               Settlement Value of Loan/Borrow
  Typ="SETL">                SETL = Settlement Value
</Amt>
<RptSide
  Side="F"                    F = Lender
  PosEfct="C"                 C = Return
  RptID="006716 NEW">        Exchange Trade Reference
  <Pty ID="OCC" R="21"/>      Clearing Group Name
  <Pty ID="00608" R="4">      Clearing Member Number
    <Sub ID="C" Typ="26"/>    Account Type
    <Sub ID="0608" Typ="17"/> DTCC Participant ID
  </Pty>
  <Pty ID="JEF" R="2"/>      Executing Broker
  <Pty ID="MGS" R="38"/>     Sub-Account
  <Pty ID="1Z0730" R="24"/>  Optional Customer Account Identifier
</RptSide>
<RptSide
  Side="G"                    G = Borrow
  PosEfct="C">              C = Return
  <Pty ID="OCC" R="21"/>      Clearing Group Name
  <Pty ID="00982" R="4">      Clearing Member Number
    <Sub ID="F" Typ="26"/>    Account Type
    <Sub ID="0982" Typ="17"/> DTCC Participant ID
  </Pty>
</RptSide>
</TrdCaptRpt>
```

## Sample Message – EOD Message - Stock Loan Trades

Real-time subscribers will receive an End of Day Message when OCC has completed processing of stock loan transactions for the day.

```
<DDSEODMessage
  BizDt="2011-02-15"
  MsgTypeCode="TRADE"
  SchemaVer="FIX 4.4"
  TransType="TRADES"
  TransProductSet="EQUI"
  FinalizationCycle="ENCORE Stock Loan Finalization"
  NoMessagesSent="5741">
</DDSEODMessage>
```

## Explanation of Selected Data Fields

**LastPx** - The processed marking price used for returns and new loan transactions.

New Loans = LastPx equals DTCC settlement value divided by the number of shares

Returns/Recalls = LastPx equals the Last Close Price for the security multiplied by the margin rate then rounded up to the appropriate level

**PosEfct** – There are two possible values for PosEfct.

**O** = Open, for a New Loan or Borrow

**C** = Close, for a Return or Recall

**RptSide & Side** – Within each Stock Loan Trade Capture Report, there will be two RptSide groups describing the lender and borrower. Recipients will know which participant is being described by looking at the Side tag:

**F** = Lender

**G** = Borrower

AQS transactions are anonymous and will always show the lender or borrower as '982.' Trade Capture Report messages for the bilateral program will show member to member transactions made at DTCC.

Within each RptSide, OCC will provide the DTCC Participant ID used for settlement and the OCC tier account used for clearing (Clearing Group, Clearing Member #, Account Type, and optionally Sub Account). DTCC and AQS will allow stock loan participants to optionally specify an OCC tier account to use for clearing. If a valid tier account was provided on the input to clearing, OCC will use this account for the position. If the specified OCC account was invalid or not provided, OCC will clear the position using the default OCC tier account for the specified DTCC Participant ID.

**Qty** = The Qty tag will show the quantity of shares processed for the new loan or return.

For returns, OCC will return the specified quantity of shares from the OCC tier account given on the transaction from AQS or DTCC, provided the account maintains enough shares. If there are insufficient shares in the designated account, OCC will return any unfilled quantity from the default tier account provided the default account maintains enough shares. After drawing from both the designated account and the default tier account, any remaining excess shares will be rejected.

## Implementation Considerations

Stock Loan messages will be created real-time. Regardless of how these messages are delivered to a recipient (real-time or batch file), recipients must be able to process each message as either a new transaction or a reclaim. These messages will always be delivered in sequential order. This means that a message for a reclaim will be sent following the initial valid transaction.



## ENCORE Transmission: Stock Loan Position and Mark To Market Report

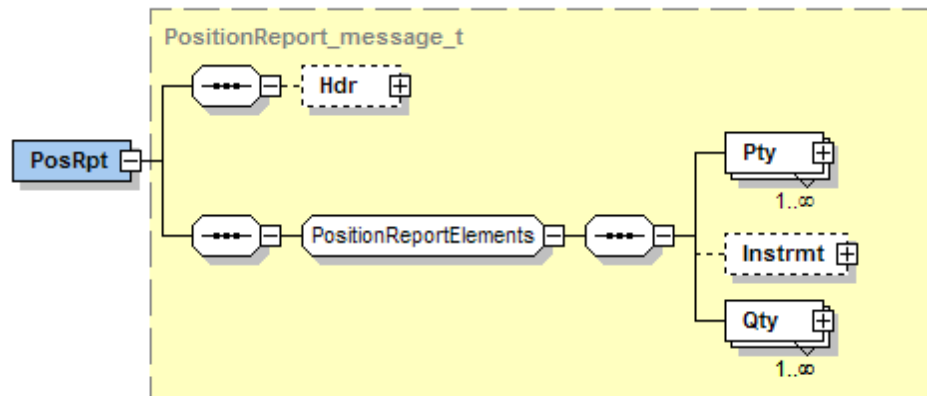
FIX Message:	Position Report
Subscription Options:	Equity
Delivery Options:	Batch File

### Overview

OCC will generate a Position Report message for each open stock loan position every business day. Within each message, OCC will provide the account holding the position, the security, the start of day and end of day loan or borrow quantities, the start of day and end of day contract values, and the mark to market amount.

These DDS messages can be used by Clearing Members in conjunction with Trade Capture Report messages to confirm and balance positions and mark to market settlement amounts with OCC.

### Message Structure



Message Layout – Stock Loan Position and Mark To Market Report

Position Report – Stock Loan Position and Mark To Market Report								
FIX Mapping						Data	Data Type	Sample Data
Fields	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	PosRpt							
721					RptID	Unique Identifier of the Position	String	1129370363
715					BizDt	Clearing Business Date	LocalMktDate	2010-06-09
724					ReqTyp	Request Type 0 = Positions	Int	0
15					Ccy	Currency	Currency	USD
730					SetPx	Settlement Price	Price	32.5
731					PriSetPx	Prior Settlement Price	Price	33.5
	→	→	Pty					
448					ID	Clearing Group Name	String	OCC
452					R	Party Role 21 = Clearing Organization	Int	21
	→	→	/Pty					
	→	→	Pty					
448					ID	Clearing Member Number	String	00608
452					R	Party Role 4 = Clearing Firm	Int	4
	→	→	→	Sub				
523					ID	Account Type	String	C
803					Typ	26 = Position Account Type (C/F/M)	Int	26
	→	→	→	/Sub				
	→	→	→	Sub				
523					ID	DTCC Participant Number	String	0608
803					Typ	17 = DTCC Participant Number	Int	17
	→	→	→	/Sub				
	→	→	/Pty					
448					ID	Sub Account Acronym	String	MGS
452					R	Party Role 38 = Sub Account	Int	38
	→	→	/Pty					

## Position Report – Stock Loan Position and Mark To Market Report

FIX Mapping						Data	Data Type	Sample Data
Fields	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	→	Pty					
448					ID	Contra DTCC Participant ID	String	0549
452					R	Party Role 17 = Contra Firm	Int	17
	→	→	/Pty					
	→	Instrmt						
55					Sym	Security Symbol	String	AET
48					ID	CUSIP	String	00817Y108
22					Src	1 = CUSIP	String	1
460					Prod	Product Type 5 = Equity	Integer	5
	→	/Instrmt						
	→	Qty						
703					Typ	Quantity Type SOD = Start of Day	String	SOD
704					Long	SOD Loan Quantity	Qty	4000
705					Short	SOD Borrow Quantity	Qty	0
	→	/Qty						
	→	Qty						
703					Typ	Quantity Type FIN = End of Day	String	FIN
704					Long	Current Loan Quantity	Qty	4000
705					Short	Current Borrow Quantity	Qty	0
	→	/Qty						
	→	Amt						
707					Typ	Amount Type SMTM = Start of Day Contract Value	String	SMTM
708					Amt	Start of Day Contract Value	Qty	134000
	→	/Amt						
	→	Amt						
707					Typ	Amount Type IMTM = Mark to Market Amount	String	IMTM
708					Amt	MTM Amount	Qty	-4000

OCC — Last Updated August 2018

## Position Report – Stock Loan Position and Mark To Market Report

FIX Mapping						Data	Data Type	Sample Data
Fields	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	/Amt						
	→	Amt						
707					Typ	Amount Type FMTM = End of Day Contract Value	String	FMTM
708					Amt	End of Day Contract Value	Qty	130000
	→	/Amt						
	/PosRpt							

## Sample Message – Stock Loan Position and Mark to Market Report

Clearing Member 00608's stock loan position with 00549 has a prior day price of \$33.50 and has lost \$1.00 in value per share. This results in a new settlement value of \$130,000 for the 4,000 shares.

<PosRpt	
RptID="1129370363"	Unique Identifier for the Report
BizDt="2010-06-09"	Clearing Business Date
ReqTyp="0"	Positions
Ccy="USD"	Currency
SetPx="32.5"	Settlement Price
PriSetPx="33.5">	Prior Settlement Price
<Pty ID="OCC" R="21"/>	Clearing Group Name
<Pty ID="00608" R="4">	Clearing Member Number
<Sub ID="C" Typ="26"/>	Account Type
<Sub ID="0608" Typ="17"/>	DTCC Participant ID
</Pty>	
<Pty ID="MGS" R="38"/>	Sub-Account
<Pty ID="0549" R="17"/>	Contra DTCC Participant Identifier
<Instrmt	
Sym="AET"	Symbol
ID="00817Y108"	CUSIP
Src="1"	1 = CUSIP
Prod="5">	5 = Equity
</Instrmt>	
<Qty	
Typ="SOD"	Start of Day
Long="4000"	Start of Day Loan Share Quantity
Short="0">	Start of Day Borrow Share Quantity
</Qty>	
<Qty	
Typ="FIN"	End of Day
Long="4000"	Current Loan Quantity
Short="0">	Current Borrow Quantity
</Qty>	
<Amt Typ="SMTM" Amt="134000"/>	Start of Day Contract Value
<Amt Typ="IMTM" Amt="-4000"/>	Mark to Market Amount
<Amt Typ="FMTM" Amt="130000"/>	End of Day Contract Value
</PosRpt>	

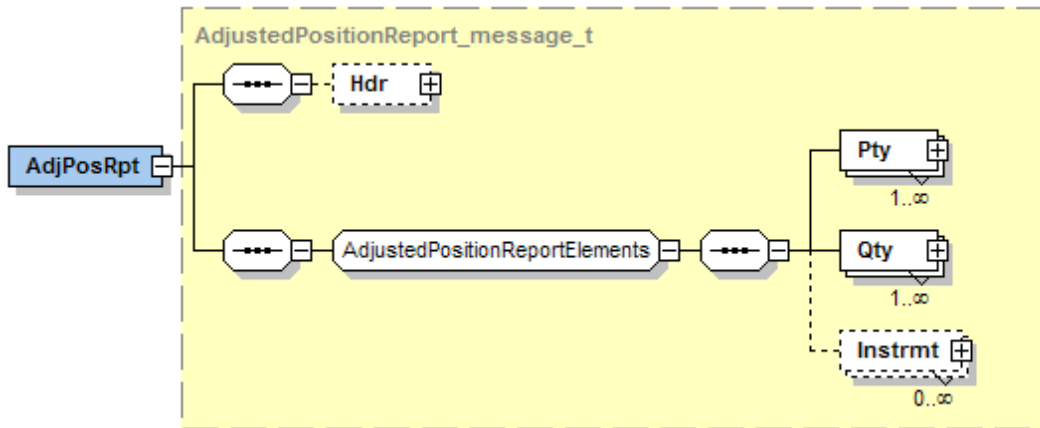
## ENCORE Transmission: Stock Loan Adjusted Position Report

FIX Message:	Adjusted Position Report
Subscription Options:	Equity
Delivery Options:	Batch File

### Overview

The Adjusted Position Report includes positions that have been adjusted due to a corporate action or manual adjustment. One message will be created for each loan and borrow position that was adjusted. Adjusted Position Report messages will be sent for all system generated stock splits and manually generated corporate action adjustments. Manually generated corporate actions are made for Cash Mergers, Stock Mergers, Spinoffs, Stock Dividends, CUSIP changes, and Reverse Stock Splits.

### Message Structure



Message Layout – Stock Loan Adjusted Position Report

Adjusted Position Report – Stock Loan									
FIX Mapping						Data		Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields				
	AdjPosRpt								
721					RptID	Unique Identifier of the Position		String	1234567
724					ReqTyp	Request Type 0 = Positions		Int	0
715					BizDt	Clearing Business Date		LocalMktDate	2010-09-10
716					SetSesID	Settle Session ID EOD = End of Day		String	EOD
730					SetPx	MTM Settlement Price (after corp. action adjustment)		Price	32.5
734					PriSetPx	Prior MTM Settlement Price (before corp. action adjustment)		Price	32.5
	→	→	Pty						
448					ID	Clearing Group Name		String	OCC
452					R	Party Role 21 = Clearing Organization		Int	21
	→	→	/Pty						
	→	→	Pty						
448					ID	Clearing Member Number		String	00608
452					R	Party Role 4 = Clearing Firm		Int	4
	→	→	→	Sub					
523					ID	Account Type		String	C
803					Typ	26 = Position Account Type (C/F/M)		Int	26
	→	→	→	/Sub					
	→	→	→	Sub					
523					ID	DTCC Participant Number		String	0608
803					Typ	17 = DTCC Participant Number		Int	17
	→	→	→	/Sub					
	→	→	/Pty						

## Adjusted Position Report – Stock Loan

		FIX Mapping				Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
	→	→	Pty					
448					ID	Sub Account Acronym	String	MGS
452					R	Party Role 38 = Sub Account	Int	38
	→	→	/Pty					
	→	→	Pty					
448					ID	Contra DTCC Participant ID	String	0549
452					R	Party Role 17 = Contra Firm	Int	17
	→	→	/Pty					
	→	Qty						
703					Typ	Quantity Type SOD = Start of Day	String	SOD
704					Long	Start of Day Loan Quantity	Qty	4000
705					Short	Start of Day Borrow Quantity	Qty	0
	→	/Qty						
	→	Qty						
703					Typ	Quantity Type BISO = Buy-In (Sell-Out)	String	BISO
704					Long	Loan Quantity after Buy-In (Sell-Out)	Qty	4000
705					Short	Borrow Quantity after Buy-In (Sell-Out)	Qty	0
	→	/Qty						
	→	Qty						
703					Typ	Quantity Type CAA = Corporate Action Adjustment	String	CAA
704					Long	Loan Quantity after the corp. action adjustment	Qty	4000
705					Short	Borrow Quantity after the corp. action adjustment	Qty	0
	→	/Qty						
	→	Qty						
703					Typ	Quantity Type PA = Manual Adjustment	String	PA
704					Long	Loan Quantity after the manual adjustment	Qty	4000



Adjusted Position Report – Stock Loan								
FIX Mapping						Data	Data Type	Sample Data
Tag#	Report Block	Component Block	Sub Component Block	Sub Sub Component Block	Fields			
705					Short	Borrow Quantity after the manual adjustment	Qty	0
	→	/Qty						
	→	Qty						
703					Typ	Quantity Type MBKD = Matched Book Delete/Decrease	String	MBKD
704					Long	Loan Quantity after the matched book deletion	Qty	4000
705					Short	Borrow Quantity after the matched book deletion	Qty	0
	→	/Qty						
	→	Qty						
703					Typ	Quantity Type MBKA = Matched Book Add/Increase	String	MBKA
704					Long	Loan Quantity after the matched book addition	Qty	4000
705					Short	Borrow Quantity after the matched book addition	Qty	0
	→	/Qty						
	→	Instrmt						
965					Status	Status of Instrument (1=New/2=Old)	String	2
55					Sym	Security Symbol	String	AET
48					ID	CUSIP	String	00817Y108
22					Src	1 = CUSIP	String	1
460					Prod	Product Type 5 = Equity	Integer	5
	→	/Instrmt						
	→	Instrmt						
965					Status	Status of Instrument (1=New/2=Old)	String	1
55					Sym	Security Symbol	String	AET
48					ID	Underlying Cusip	String	00817Y109
22					Src	1 = CUSIP	String	1
460					Prod	Product Type 5 = Equity	Integer	5
	→	/Instrmt						
	/AdjPosRpt							

## Sample Message – Stock Loan Adjusted Position Report – CUSIP Change

Clearing Member 00608 has a loan position of 4,000 shares in security symbol AET, CUSIP 00817Y108. The security's CUSIP is changing to 00817Y109.

```
<AdjPosRpt
  RptID="1129370363"           Unique Identifier for the Report
  ReqTyp="0"                   Positions
  BizDt="20010-09-10"         Clearing Business Date
  SetSesID="EOD"              End of Day
  SetPx="32.5"                 Settlement Price
  PriSetPx="32.5">          Prior Settlement Price
  <Pty ID="OCC" R="21"/>      Clearing Group Name
  <Pty ID="00608" R="4">     Clearing Member Number
    <Sub ID="C" Typ="26"/>   Account Type
    <Sub ID="0608" Typ="17"/> DTCC Participant ID
  </Pty>
  <Pty ID="MGS" R="38"/>     Sub-Account
  <Pty ID="0549" R="17"/>   Contra DTCC Participant Identifier
<Qty
  Typ="SOD"                   Start of Day
  Long="4000"                 Start of Day Loan Quantity
  Short="0"/>               Start of Day Borrow Quantity
<Qty
  Typ="BISO"                  Buy-In (Sell-Out)
  Long="4000"                 Loan Quantity after Buy-In (Sell-Out)
  Short="0"/>               Borrow Quantity after Buy-In (Sell-Out)
<Qty
  Typ="CAA"                   Corporate Action Adjustment
  Long="4000"                 Loan Quantity after the Corporate Action Adjustment
  Short="0"/>               Borrow Quantity after the Corporate Action Adjustment
<Instrmt
  Status="2"                  Old
  Sym="AET"                   Symbol
  ID="00817Y108"             CUSIP
  Src="1"                     1 = CUSIP
  Prod="5"/>                 5 = Equity
<Instrmt
  Status="1"                  New
  Sym="AET"                   Symbol
  ID="00817Y109"             CUSIP
  Src="1"                     1 = CUSIP
  Prod="5"/>                 5 = Equity
</AdjPosRpt>
```

## Sample Message – Adjusted Position without a CUSIP change – Stock Loan

Clearing Member 00608 has a loan position of 4,000 shares in security symbol AET, CUSIP 00817Y108. A 2-for-1 stock split occurs and the settlement price is changed from 32.50 to 16.25 and the number of shares increases to 8,000.

<AdjPosRpt	
RptID="41386431"	Unique Identifier for the Report
ReqTyp="0"	Positions
BizDt="2010-09-10"	Clearing Business Date
SetSesID="EOD"	End of Day
SetPx="16.25"	Settlement Price
PriSetPx="32.5">	Prior Settlement Price
<Pty ID="OCC" R="21"/>	Clearing Group Name
<Pty ID="00608" R="4">	Clearing Member Number
<Sub ID="C" Typ="26"/>	Account Type
<Sub ID="0608" Typ="17"/>	DTCC Participant ID
</Pty>	
<Pty ID="MGS" R="38"/>	Sub-Account
<Pty ID="0549" R="17"/>	Contra DTCC Participant Identifier
<Qty	
Typ="SOD"	Start of Day
Long="4000"	Start of Day Loan Quantity
Short="0"/>	Start of Day Borrow Quantity
<Qty	
Typ="BISO"	Buy-In (Sell-Out)
Long="4000"	Loan Quantity after Buy-In (Sell-Out)
Short="0"/>	Borrow Quantity after Buy-In (Sell-Out)
<Qty	
Typ="CAA"	Corporate Action Adjustment
Long="8000"	Loan Quantity after the Corporate Action Adjustment
Short="0"/>	Borrow Quantity after the Corporate Action Adjustment
<Instrmt	
Status="2"	Old
Sym="AET"	Symbol
ID="00817Y108"	CUSIP
Src="1"	1 = CUSIP
Prod="5"	5 = Equity
Dated="2009-07-21"/>	Activation Date
<Instrmt	
Status="1"	New
Sym="AET"	Symbol
ID="00817Y108"	CUSIP
Src="1"	1 = CUSIP
Prod="5"/>	5 = Equity
</AdjPosRpt>	

## Sample Message – Matched Book Delete/Decrease – Stock Loan

A matched book delete or decrease (MBKD) transaction decreases the position of the defaulting clearing member to the greatest extent possible based on the rematching of the lender and borrower of the defaulting clearing member's position for the same security. In the below sample message, Clearing Member 00286 has a start of day loan position of 900 shares for security symbol EIGR, CUSIP 28249U105. After a matched book delete transaction of 900 shares is applied, the Long is 0.

<AdjPosRpt	
RptID="16305259"	Unique Identifier for the Report
ReqTyp="0"	Positions
BizDt="2016-08-15"	Clearing Business Date
SetSesID="EOD"	End of Day
SetPx="19"	Settlement Price
PriSetPx="19">	Prior Settlement Price
<Pty ID="OCC" R="21"/>	Clearing Group Name
<Pty ID="00286" R="4">	Clearing Member Number
<Sub ID="C" Typ="26"/>	Account Type
<Sub ID="0286" Typ="17"/>	DTCC Participant ID
</Pty>	
<Pty ID="0352" R="17"/>	Contra DTCC Participant Identifier
<Qty	
Typ="SOD"	Start of Day
Long="900"	Start of Day Loan Quantity
Short="0"/>	Start of Day Borrow Quantity
<Qty	
Typ="MBKD"	Matched Book Delete/Decrease
Long="0"	Loan Quantity after Matched Book Delete/Decrease
Short="0"/>	Borrow Quantity after Matched Book Delete/Decrease
<Instrmt	
Status="2"	Old
Sym="EIGR"	Symbol
ID="28249U105"	CUSIP
Src="1"	1 = CUSIP
Prod="5"/>	5 = Equity
<Instrmt	
Status="1"	New
Sym="EIGR"	Symbol
ID="28249U105"	CUSIP
Src="1"	1 = CUSIP
Prod="5"/>	5 = Equity
</AdjPosRpt>	

## Sample Message – Matched Book Add/Increase – Stock Loan

A matched book add or increase (MBKA) transaction establishes a new position between the counterparties of a defaulting Clearing Member. In the below sample message, Clearing Member 00353 is the surviving lender of the defaulting clearing member. Clearing Member 0076 is the surviving borrower of the defaulting clearing member. After a matched book add transaction is applied, Clearing Member 00353 has a loan position of 3000 shares in security symbol KMX, CUSIP 143130102.

<AdjPosRpt	
RptID="16305245"	Unique Identifier for the Report
ReqTyp="0"	Positions
BizDt="2016-08-15"	Clearing Business Date
SetSesID="EOD"	End of Day
SetPx="61"	Settlement Price
PriSetPx="0">	Prior Settlement Price
<Pty ID="OCC" R="21"/>	Clearing Group Name
<Pty ID="00353" R="4">	Clearing Member Number
<Sub ID="F" Typ="26"/>	Account Type
<Sub ID="8353" Typ="17"/>	DTCC Participant ID
</Pty>	
<Pty ID="0076" R="17"/>	Contra DTCC Participant Identifier
<Qty	
Typ="SOD"	Start of Day
Long="0"	Start of Day Loan Quantity
Short="0"/>	Start of Day Borrow Quantity
<Qty	
Typ="MBKA"	Matched Book Add/Increase
Long="3000"	Loan Quantity after Matched Book Add/Increase
Short="0"/>	Borrow Quantity after Matched Book Add/Increase
<Instrmt	
Status="2"	Old
Sym="KMX"	Symbol
ID="143130102"	CUSIP
Src="1"	1 = CUSIP
Prod="5"/>	5 = Equity
<Instrmt	
Status="1"	New
Sym="KMX"	Symbol
ID="143130102"	CUSIP
Src="1"	1 = CUSIP
Prod="5"/>	5 = Equity
</AdjPosRpt>	

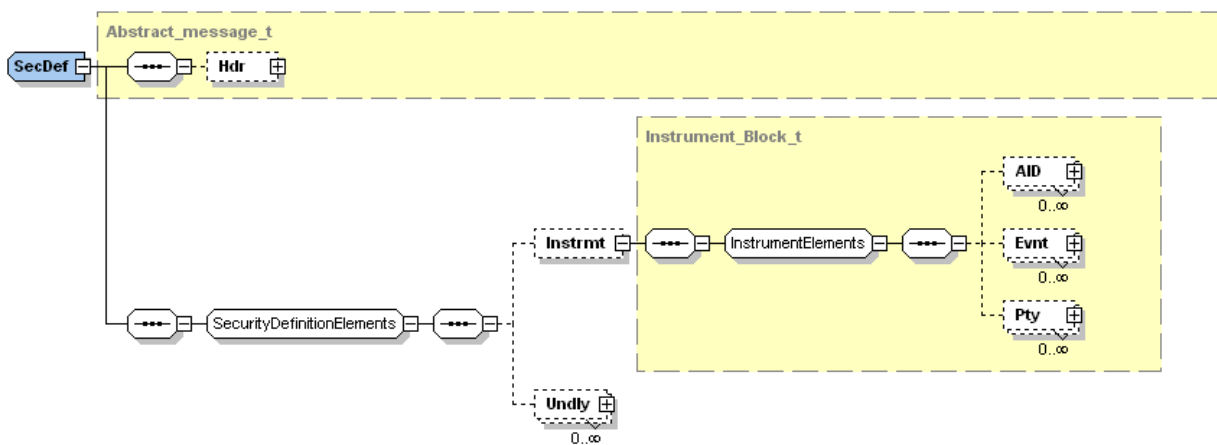
# ENCORE Transmission: Eligible Securities Report

FIX Message:	Security Definition
Subscription Options:	Equity
Delivery Options:	Batch File

## Overview

The Eligible Securities file provides a list of all securities which are eligible for stock loan and/or collateral. The message includes the symbol and cusip for each security.

## Message Structure



Message Layout – Security Definition – Eligible Securities

Security Definition –Eligible Securities Report							
FIX Mapping					Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Fields			
	SecDef						
715				BizDt	Clearing Business Date	Business Date	2010-06-08
964				RptID	Unique Identifier of the Eligible Security	String	421
	→	Instrmt					
55				Sym	Security Symbol	String	AET
48				ID	CUSIP	String	00817Y108
22				Src	1 = CUSIP	String	1
460				Prod	Product Type 5 = Equity	Integer	5
	→	/Instrmt					
<i>The number of Market Segment Blocks depends on the number of programs each security is eligible for. One Market Segment block will be included for each program.</i>							
	→	→	MktSegGrp				
1300				MktSegID	Identifies the market segment STOCKLOAN = Eligible for Stock Loan COLLATERAL = Eligible for Collateral	String	STOCKLOAN
	→	→	/ MktSegGrp				
	/SecDef						

## Sample Message – Eligible Securities

This message is showing all of the securities that are eligible for deposit in either the bilateral or AQS stock loan programs and that it is also Collateral eligible.

```
<SecDef
  BizDt="2010-09-10"           Clearing Business Date
  RptID="41386431">         Unique Identifier for the Report
<Instrmt
  Sym="AET"                   Symbol
  ID="00817Y108"             CUSIP
  Src="1"                    1 = CUSIP
  Prod="5">                 5 = Equity
</Instrmt>
<MktSegGrp
  MktSegID= "STOCKLOAN">   Stock Loan Eligible
</MktSegGrp>
<MktSegGrp
  MktSegID= "COLLATERAL"> Collateral Eligible
</MktSegGrp>
</SecDef>
```



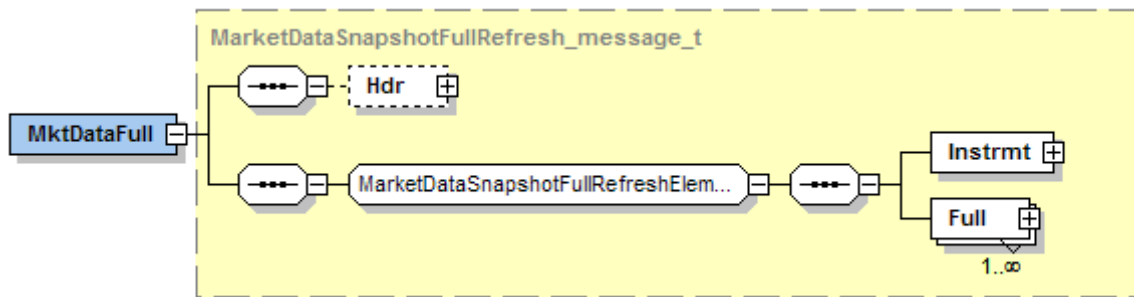
## ENCORE Transmission: Stock Loan Eligible Security Prices

FIX Message:	Hedge Eligible Security Prices
Subscription Options:	Equity
Delivery Options:	Batch File

### Overview

The Hedge Eligible Security Prices file will include all securities which are Stock Loan eligible and the values used for mark to market processing.

### Message Structure



Message Layout – Stock Loan Eligible Security Prices

Market Data Snapshot Full Refresh – Stock Loan Eligible Security Prices							
FIX Mapping					Data	Data Type	Sample Data
Tag #	Report Block	Component Block	Sub Component Block	Fields			
	MktDataFull						
963				RptID	Unique Identifier of the Prices Report	String	6009999
715				BizDt	Clearing Business Date	LocalMktDate	2011-04-07
	→	Instrmt					
55				Sym	Symbol	String	IBM
48				ID	Underlying Cusip	String	459200101
22				Src	1 = CUSIP	String	1
107				Desc	Security Description	String	INTL BUSINESS MACHINE
	→	/Instrmt					
	→	Full					
269				Typ	Market Data Entry Type (5=Closing Price)	Char	5
270				Px	Market Data Entry Price (Underlying Composite Close Price)	Price	161.37
15				Ccy	Identifies currency used for price	Currency	USD
272				Dt	Market Data Entry Date	UTCDateOnly	2011-04-07
	→	/Full					
	/MktDataFull						

## Sample Message – Stock Loan Eligible Security Prices

<MktDataFull	
RptID="6009999"	Unique Identifier for the Report
BizDt="2011-04-07">	Clearing Business Date
<Instrmt	
Sym="IBM"	Symbol
ID="459200101"	CUSIP
Src="1"	1 = CUSIP
Desc="INTL BUSINESS MACHINE"/>	Security Description
<Full	
Typ="5"	5=Closing Price
Px="161.37"	Underlying Closing Price
Ccy="USD"	Currency
Dt="2011-04-07"/>	Market Data Entry Date
</MktDataFull>	

---

## Appendix

### Revision History

Version	Date	Author	Version Updates
1.3	1/27/2016	OCC	Added: <ul style="list-style-type: none"><li>• Revision history table</li><li>• Buy-In (Sell-Out) BISO Qty block and Quantity Type in the Stock Loan Adjusted Position Report</li></ul>
1.4	10/3/2016	OCC	Updated Stock Loan Adjusted Position Report and sample messages to include two new tags: Matched Book Add/Increase and Matched Book Delete/Decrease.
1.5	8/28/2018	OCC	Applied branding updates.