CME Group

A CME/Chicago Board of Trade/NYMEX Company

CME Clearing

CME Collateral Management API

Version: 1.0
July 29, 2014

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3 Collateral Management Workflows

This section illustrates the workflows being supported for collateral deposit and withdrawal between the customer and the clearinghouse.
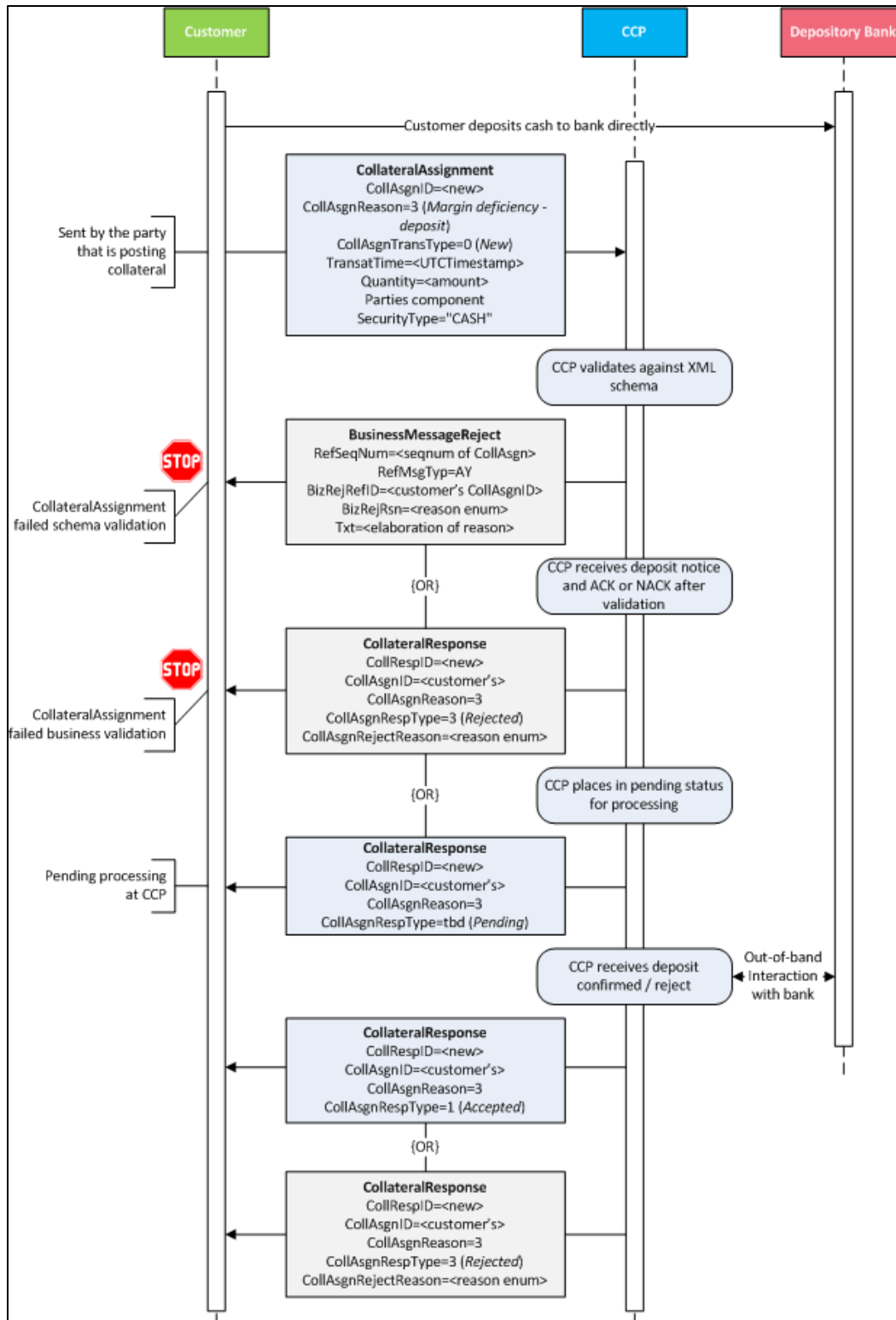
It should be noted that the terminology of "deposit" and "withdrawal" is from the perspective of the clearinghouse. For example, cash being deposited is cash deposited by the customer into the customer's account at the clearinghouse.

Note: There are times during which the underlying BAMS application is not available and will not process incoming client messages, e.g. weekends and routine system maintenance windows. If a client submits a CollateralAssignment request during those times it will be accepted and queued by CME's FIX infrastructure but no response will be returned including "reject" and "pending" until the application returns to normal operation.

3.1 Cash Deposit

The cash deposit workflow starts with the customer depositing cash at the depository bank and informing the clearinghouse at the same time that cash has been deposited for their account. The deposit was most likely triggered by a margin call issued by the CCP. Once the deposit notice passes basic validation the clearinghouse will acknowledge the CollateralAssignment "pending" (or "reject" it if validation fails). Once the clearinghouse has been able to confirm the deposit with the depository bank, the clearinghouse will confirm with the customer that the cash deposit has been "accepted". A reject would be sent if the depository bank fails to confirm the deposit.

Figure 1: Cash deposit

Customer | CCP | Depository Bank

Customer deposits cash to bank directly

Sent by the party that is posting collateral

CollateralAssignment
CollAsgnID=<new>
CollAsgnReason=3 (*Margin deficiency - deposit*)
CollAsgnTransType=0 (*New*)
TransatTime=<UTCTimestamp>
Quantity=<amount>
Parties component
SecurityType="CASH"

CCP validates against XML schema

BusinessMessageReject
RefSeqNum=<seqnum of CollAsgn>
RefMsgTyp=AY
BizRejRefID=<customer's CollAsgnID>
BizRejRsn=<reason enum>
Txt=<elaboration of reason>

STOP
CollateralAssignment failed schema validation

{OR}

CCP receives deposit notice and ACK or NACK after validation

CollateralResponse
CollRespID=<new>
CollAsgnID=<customer's>
CollAsgnReason=3
CollAsgnRespType=3 (*Rejected*)
CollAsgnRejectReason=<reason enum>

STOP
CollateralAssignment failed business validation

{OR}

CCP places in pending status for processing

CollateralResponse
CollRespID=<new>
CollAsgnID=<customer's>
CollAsgnReason=3
CollAsgnRespType=tbd (*Pending*)

Pending processing at CCP

CCP receives deposit confirmed / reject

Out-of-band Interaction with bank

CollateralResponse
CollRespID=<new>
CollAsgnID=<customer's>
CollAsgnReason=3
CollAsgnRespType=1 (*Accepted*)

{OR}

CollateralResponse
CollRespID=<new>
CollAsgnID=<customer's>
CollAsgnReason=3
CollAsgnRespType=3 (*Rejected*)
CollAsgnRejectReason=<reason enum>

3.2 Securities deposit

The securities deposit workflow is similar to the cash deposit. After receiving the CollateralAssignment message the clearinghouse will do basic validation on the message, and reject it on failure. Once the message is successfully validated, the clearinghouse will validate whether the security being deposited is a valid security which meets eligibility requirements. If the security does not meet eligibility a "reject" will be send in the CollateralResponse. A "pending" will be sent if the validation and eligibility verification is successful to indicate that the deposit is being processed. Once the clearinghouse has confirmed with the depository bank that the security has been deposited, the clearinghouse will confirm to the customer via a CollateralReponse of "accept" indicating the collateral has been accepted.
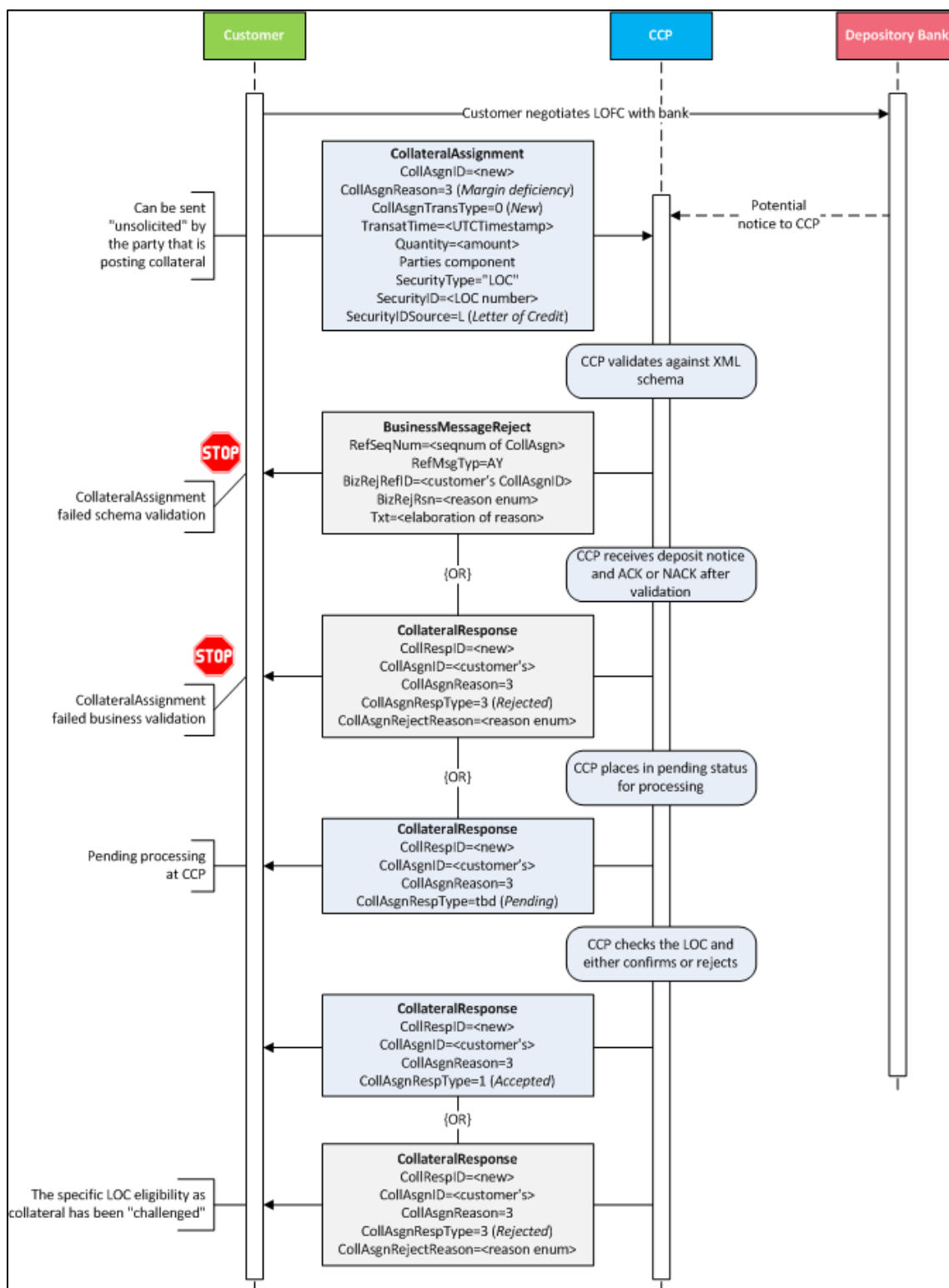
Figure 2: Securities deposit
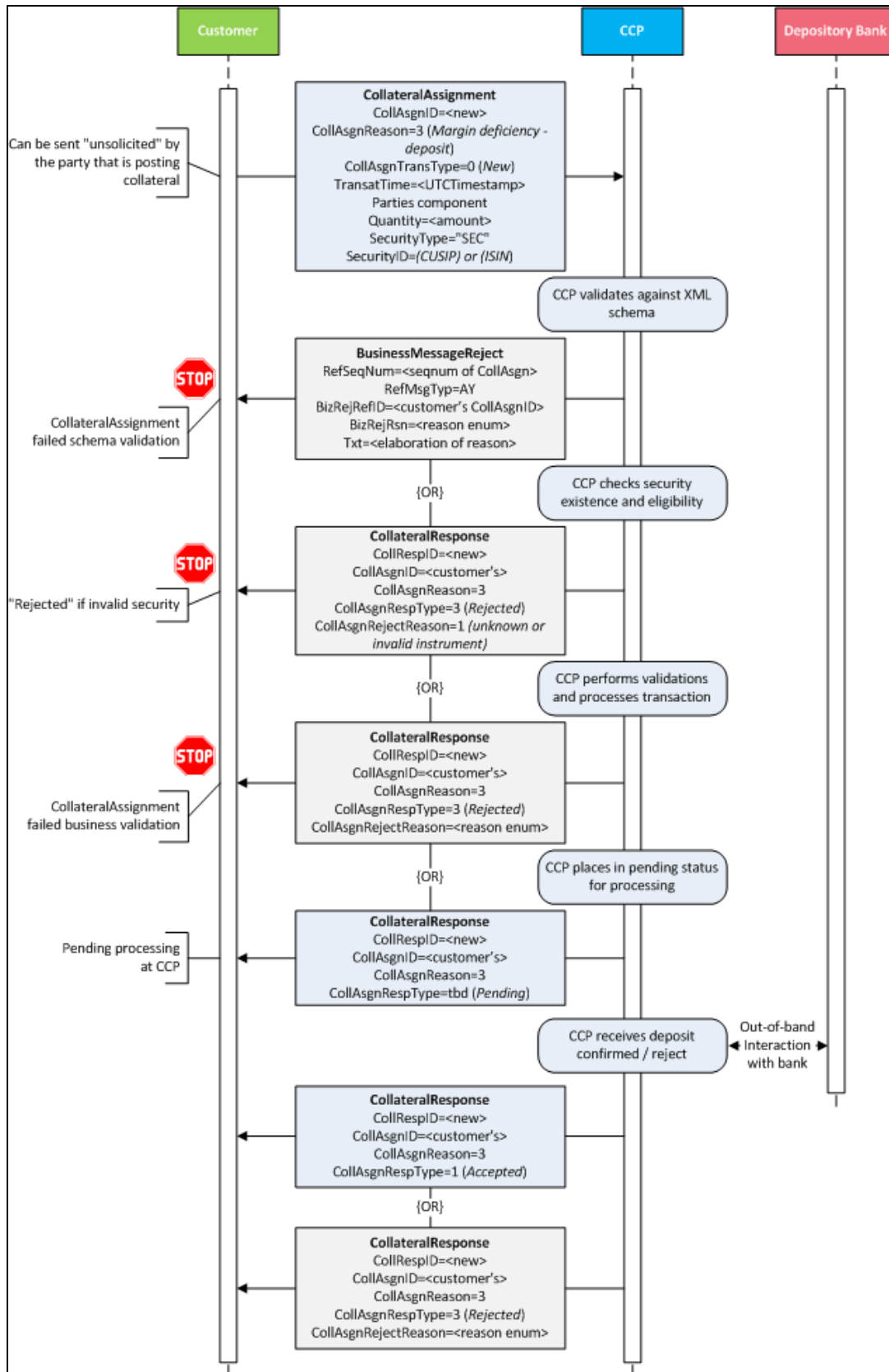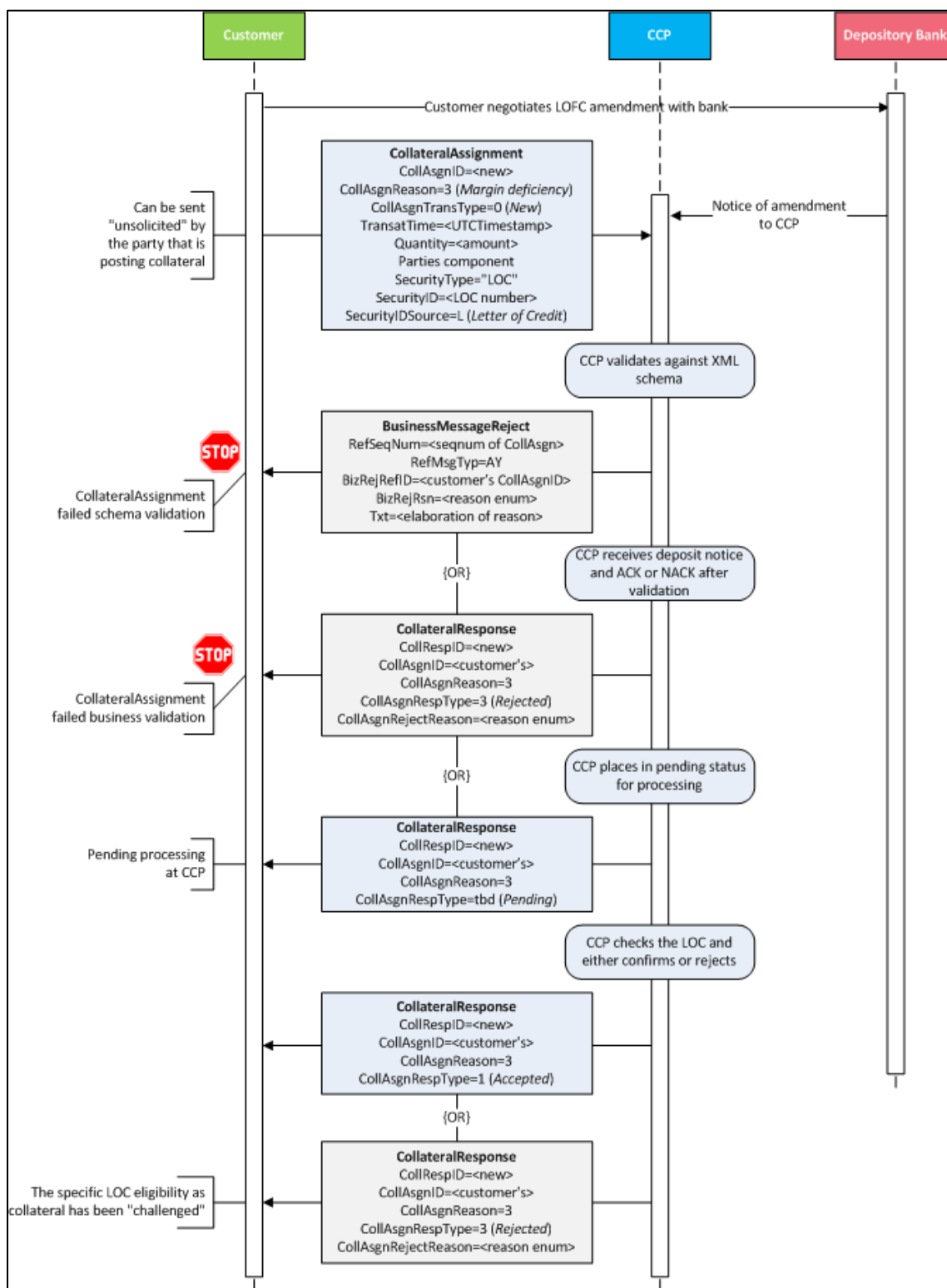
3.3 Letter of Credit deposit

Letter of Credit may be used as collateral and the workflow is essentially the same as for cash and securities workflow. The most typical flow occurs as the result of amendment of an existing Letter of Credit.

Figure 3: Letter of Credit deposit

3.4 Letter of Credit amendment

Figure 4: Letter of Credit amendment

3.5 Cash withdrawal

The customer may withdraw cash collateral from their clearinghouse asset account if there is excess in the account. Once the withdrawal is received by the clearinghouse the request is acknowledged as "pending" (or rejected). Once the clearinghouse confirms the withdrawal after receiving confirmation from the depository bank that there is sufficient funds to be withdrawn, an "accept" is sent to the customer.

Figure 5: Cash withdrawal
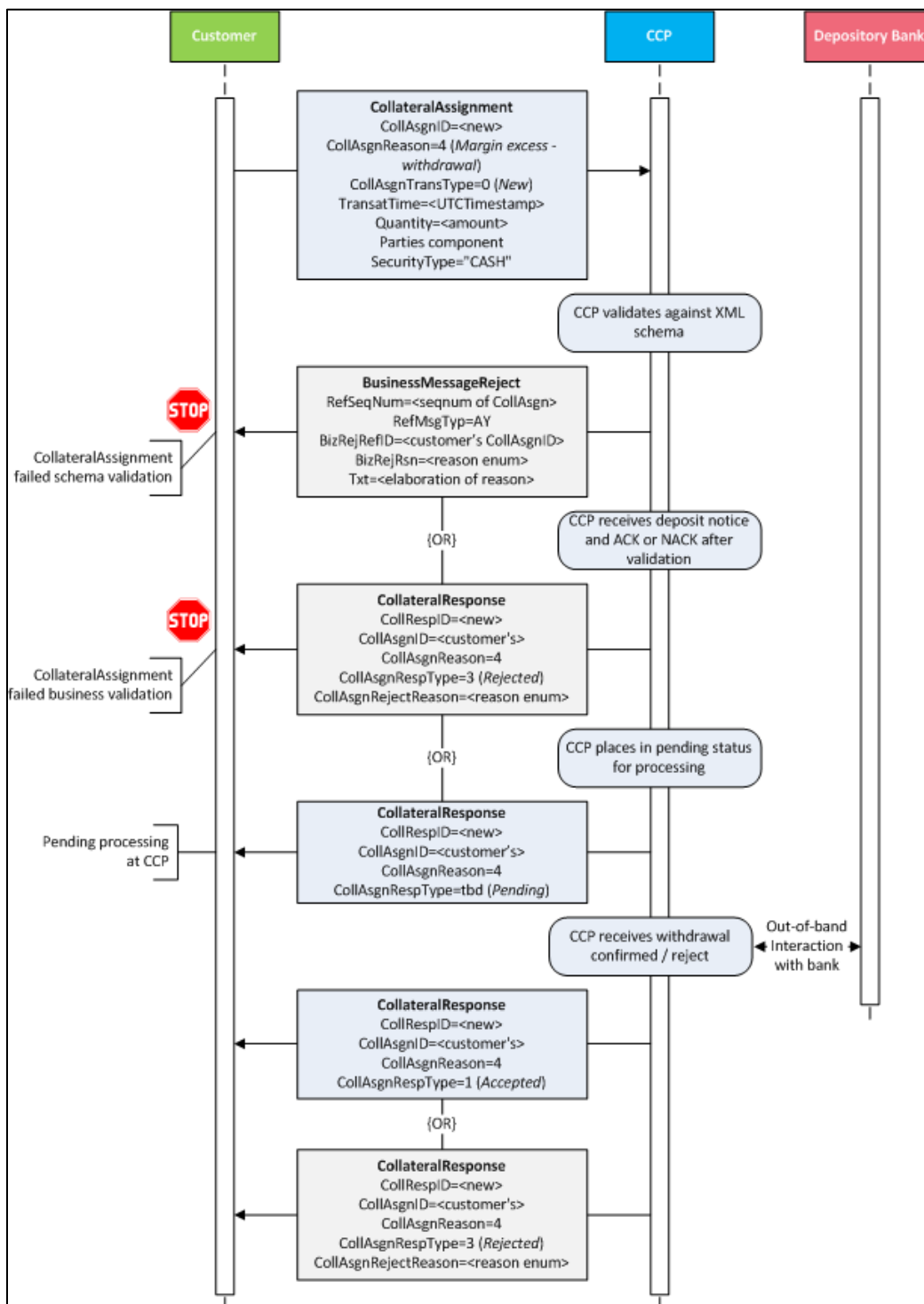
3.6 Securities withdrawal

The withdrawal workflow for withdrawing securities is essentially the same as for cash withdrawal. When the collateral is successfully withdrawn the "accept" message will indicate that the collateral's status is now "unassigned" - meaning the security collateral is no longer assigned as collateral in the account.
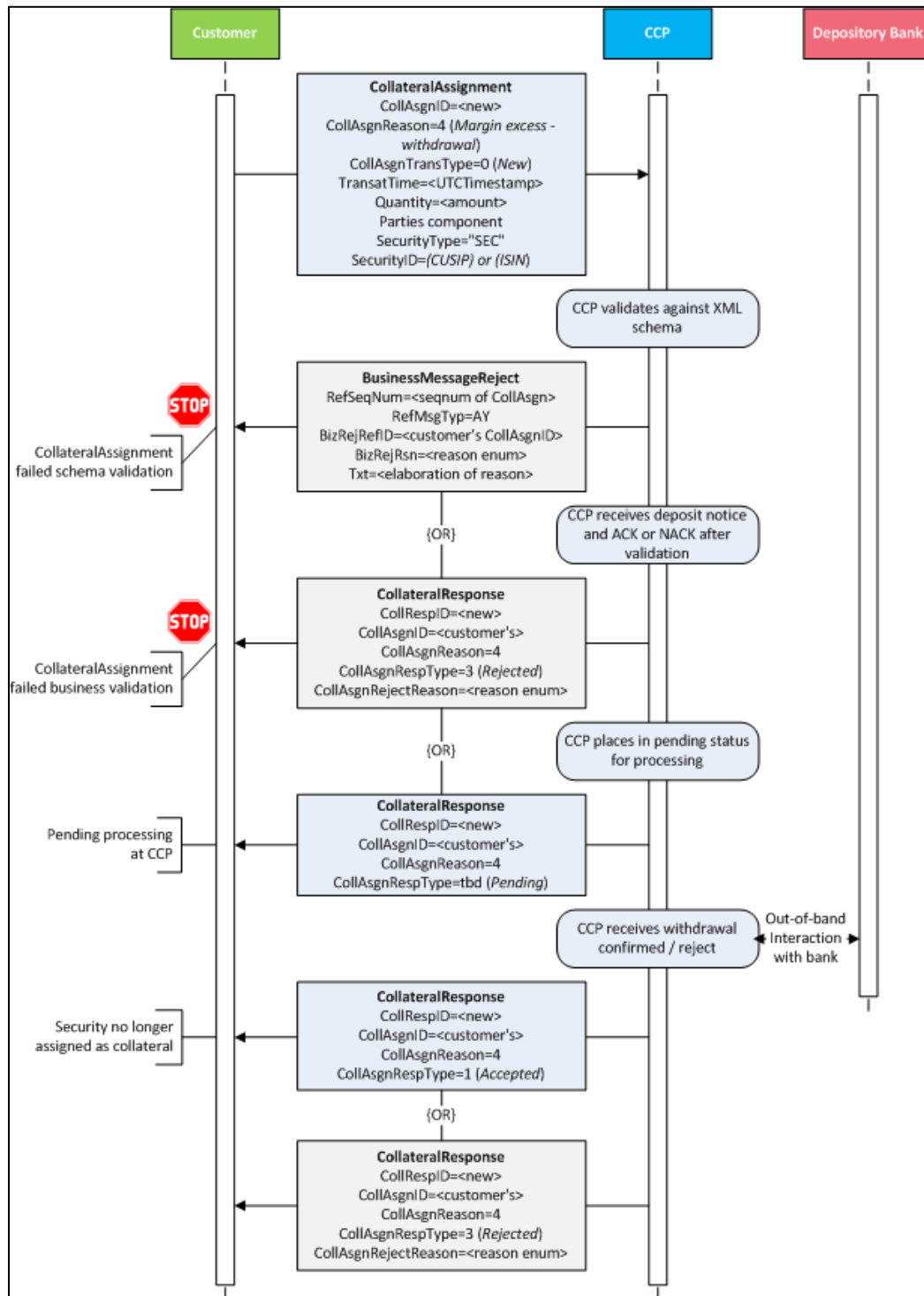
3.7 Deposit or Withdrawal Cancel Request

The customer may request a cancellation of a previously sent deposit or withdrawal notification. Whether the request can be honored by the clearinghouse or not will depend on whether the clearinghouse has begun the transaction process with the depository bank. Once the subject transaction is in "pending" it cannot be cancelled.

Figure 7: Cancel Collateral Deposit or Withdrawal
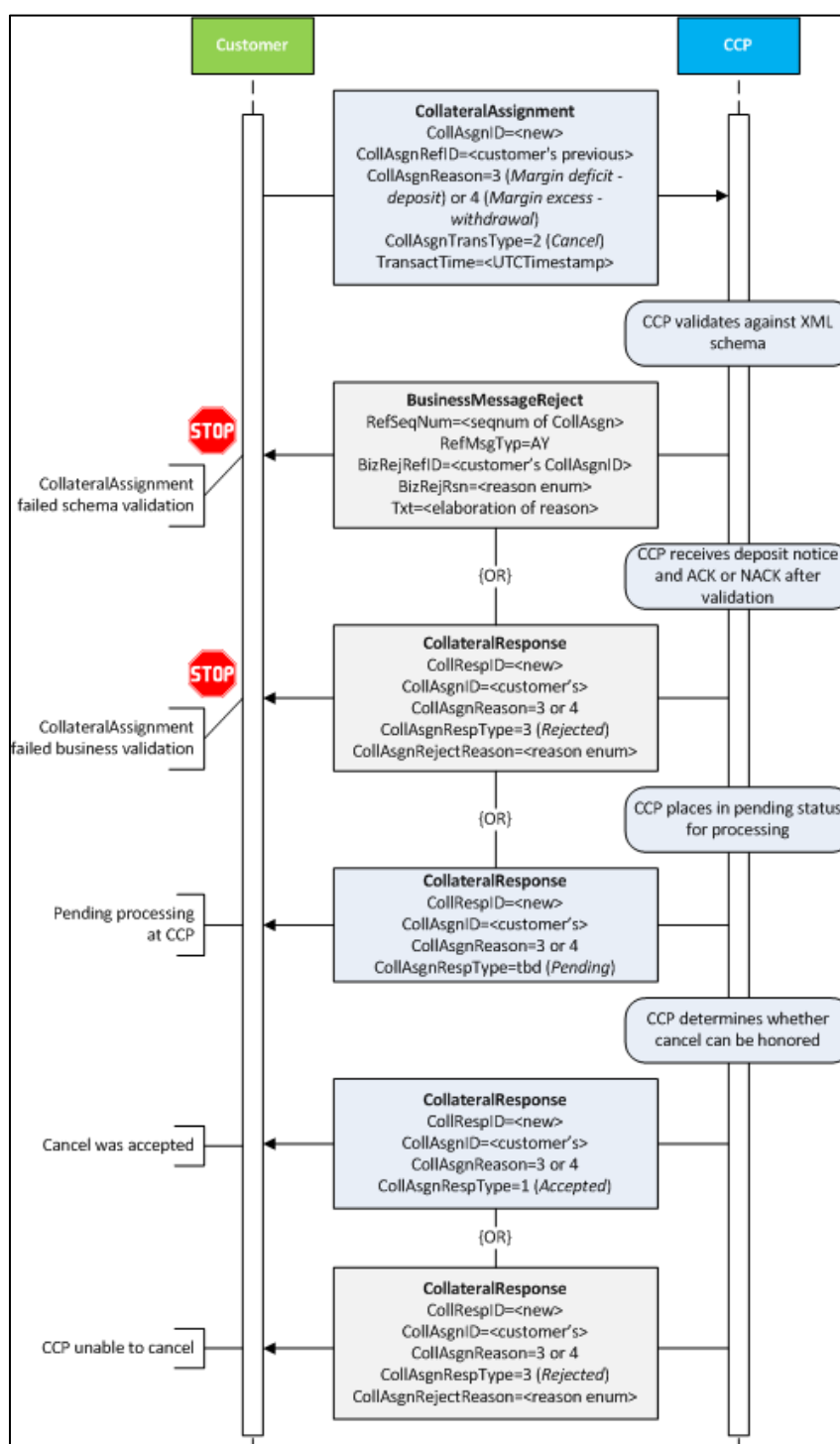
4 FIXML Message Definitions

4.1 Version Attributes for all Messages

Usage:

The following attributes must be included in the base <FIXML> element in each message sent to and received from the API.

Table 1: FIXML Attributes

Base element <FIXML>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
FIX Version Number	v		Y	Indicates the version of FIX being used (including Service Pack).	5.0 SP2
FIX Extension Version	xv		Y	Indicates the FIX Extension version.	162
Custom Application Version	cv		Y	Indicates the Custom Application version.	CME.0001
End <Hdr> component					

4.2 Standard Header for Requests Submissions and Responses

Usage:
The following element and attributes must be included in each message sent to and received from the API.

Table 2: StandardHeader

Standard Header <Hdr>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
SenderCompID	SID	String	Y	This attribute identifies the party or the Submitter of the message. The value is assigned by CME.	Client sending – a value assigned by CME. Client receiving – "CME".
SenderSubID	SSub	String	Y	This attribute qualifies the Sender. The user ID assigned to the sender must be provided.	Client sending – the User ID assigned to the sender. Client receiving – <tbd>.
TargetCompID	TID	String	Y	This attribute identifies the receiver of the message. This must be set to CME.	Client sending – "CME". Client receiving – a value assigned by CME.
TargetSubID	TSub	String	Y	This qualifies the receiver of the message. For submitting trades directly to CME RS T this must be set to CMESDR.	Client sending – <tbd>. Client receiving – the User ID assigned to the receiver.
SendingTime	Snt	UTCTimestamp	Y	Message transmission time.	
End <Hdr> component					

4.3 CollateralAssignment

Usage:

The CollateralAssignment message is used for the party posting collateral to the clearinghouse to inform the clearinghouse of a collateral assignment for their asset or settlement account.

The party posting collateral must indicate whether they are depositing (@AsgnRsn=3 (Margin deficiency)) or withdrawing collateral (@AsgnRsn=4 (Margin excess)).

Response Message:

CollateralResponse

Table 3: CollateralAssignment message

CollateralAssignment (MsgTyp = AY) <CollAsgn>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
CollAsgnID	ID		Y	Unique identifier for the collateral assignment message assigned by the party sending the message.	
CollReqID	ReqID		N	Identifer of CollReqID to which the Collateral Assignment is in response	
CollAsgnReason	AsgnRsn		Y	Reason for collateral assignment	3 = Margin deficiency (deposit) 4 = Margin excess (withdrawal)
CollAsgnTransType	TransTyp		Y	The transaction type of this collateral assignment message.	0 = New
TransactTime	TxnTm		Y	Timestamp of the business event that triggered this message.	
ClearingBusinessDate	BizDt		N	The clearing business date of the request. The date on which the transaction was entered.	
SettlDate	SettlDt		N	Optionally used to provide the value date of the transaction where the deposit or withdrawal is for a specific future date. May be overridden by the CCP.	
Quantity	Qty		Y	The par amount, number of shares or cash amount of the security being deposited or withdrawn.	
WireReference	WreRef	String	N	The depository's wire transfer reference of the deposit or withdrawal	

CollateralAssignment (MsgTyp = AY) <CollAsgn>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
				associated with the transaction, e.g. Fedwire OMAD or SWIFT OSN.	
TradeDate	TrdDt	LocalMktDate	N	Indicates date of trade of the security associated this message in YYYYMMDD format. Needed to match the pledge with the broker's message to the custodian.	
TransactionID	TxnID	String	N	The service provider's (CCP's) underlying transaction identifier.	
FirmTransactionID	FirmTxnID	String	N	The submitter's (Clearing Firm's) underlying transaction identifier.	
Component <Header>	*Hdr*			See above.	
Component <Parties>	*Pty*				
→ *PartyID*	ID		Y	Used to identify the party.	
→ *PartyIDSource*	Src		Y	Used to identify class source of PartyID value (e.g. BIC).	B = BIC D = Proprietary (e.g. Alias) H = Clearing House member code
→ *PartyRole*	R		Y	Identifies the type of PartyID (e.g. Executing Broker).	4 = Clearing firm 21 = Clearing organization 28 = Custodian - the custodial bank where the asset account is held 101 = Collateral asset account - identifies the client's asset account
→ *Component <PtysSubGrp>*	Sub				
→ → *PartySubID*	ID		N		For @Typ = 4 CLR = collateral for normal initial margin SECR = collateral for guarantee fund For @Typ = 43 CSEG = customer segregated CNSEG = customer non-segregated COTC = customer cleared

CollateralAssignment (MsgTyp = AY) <CollAsgn>					
Field Name		**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
						swaps NSEG = non-segregated, house/proprietary For @Typ = 26 PB = SECR = DELIV = For @Typ = 44 CDS = credit default swaps IRS = interest rate swaps DFLT = base guarantee fund
→	→	*PartySubIDType*	Typ		N		4 = Application - used to distinguish between asset accounts that have different processing requirements (i.e. business function) 11 = Registration number (for settlement instructions – the standing instruction profile identifier) 26 = Position account type 43 = Funds segregation type 44 = Guarantee fund
End <Sub> component						
End <Pty> component						
Component <Instrument>		***Instrmt***		***N***		
SecurityID		ID		N	Conditionally required when depositing or withdrawing a non-cash instrument.	
SecurityIDSource		Src		N	Conditionally required when SecurityID is specified.	1 = CUSIP 4 = ISIN L = Letter of Credit
SecAltIDGrp		AID		***N***	Number of alternate Security Identifiers	
SecurityType		SecTyp		Y	Specifies whether the collateral is "cash" or "security". "SEC" is used in requests and responses.	CASH = cash collateral LOFC = letter of credit SEC = security collateral

CollateralAssignment (MsgTyp = AY) <CollAsgn>					
Field Name	FIXML Name	Data Type	Rq'd	Description	Supported Values
PassThruIndicator	PassThru	Boolean	N	Used to flag a Letter of Credit as "Pass Thru".	Y = Pass through N = Not pass through
IssueDate	Issued		N	Date the instrument was issued. Required for Letters of Credit.	
MaturityDate	MatDt			Date the instrument matures. Required for Letters of Credit, optional for Bonds.	
PriceQuoteCurrency	PxQteCcy		N	Currency of the asset in which the price is quoted.	ISO 4217 3-character currency code.
Issuer	Issr		N	Issuing bank for Letter of Credit.	
DatedDate	Dated		N	For Letter of Credit gives the date of the last amendment if applicable.	
Component <InstrumentParties>	*Pty*				
→ *InstrumentPartyID*	ID		N	Used to identify the party.	
→ *InstrumentPartyIDSource*	Src		N	Used to identify class source of PartyID value	D = Proprietary
→ *InstrumentPartyRole*	R		N	Identifies the role of PartyID	110 = Borrower, i.e. Letter of Credit Applicant
End <Pty> component					
End <Instrmt> component					
End <CollAsgn> message					

4.4 CollateralResponse

Usage:

The CollateralResponse message is used by the party receiving collateral, the clearinghouse, to inform the party posting collateral for their asset or settlement account whether the collateral has been accepted or rejected. It is also used to communicate that the collateral assignment is in "pending" state – schema business-level validation have succeeded but posting to the account is not yet complete. If the request is rejected the reason for reject is elaborated in the Text [@Txt] field, e.g. "NO SUCH SECURITY ON DEPOSIT".

Note that if the request fails high-level schema validation a BusinessMessageReject may be returned instead of CollateralResponse. Such failures might include invalid XML formatting, elements or required attributes missing or out of order, or invalid values in CollAsgnTransType or CollAsgnReason.

Response Message:

None

Table 4: Collateral Response message

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
CollRespID	RespID		Y	Unique identifier for the collateral response message.	
CollAsgnID	ID		Y	Unique identifier of the collateral assignment message this is in response to.	
CollAsgnReason	AsgnRsn		Y	Reason for collateral assignment	3 = Margin deficiency (deposit) 4 = Margin excess (withdrawal)
CollAsgnRespType	RespTyp		Y	The type of response.	1 = Accepted - transaction is completed 3 = Rejected (see elaboration in Text) tbd = Transaction is pending tbd = Transaction is completed with warning – see Text.
CollAsgnRejectReason	RejRsn		N	Conditionally required when @RespTyp=3 (Rejected). Reason collateral assignment was rejected	1 = Unknown or invalid instrument 2 = Unauthorized transaction 3 = Insufficient collateral to support a withdrawal 4 = Invalid type of collateral 99 = Other - specify further in @Txt
TransactTime	TxnTm		Y	Timestamp of the business event that triggered this message.	
CollApplType	ApplTyp		N	Conveys how the collateral should be/has been applied.	0 = specific deposit 1 = general (the default)
ClearingBusinessDate	BizDt		Y	The clearing business date of the report. The date on which the transaction was entered.	
SettlDate	SettlDt		Y	The value date of the transaction where the deposit or withdrawal is	

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	FIXML Name	Data Type	Rq'd	Description	Supported Values
				for a specific future date.	
Quantity	Qty		Y	The par amount, number of shares or cash amount of the security being deposited or withdrawn.	
WireReference	WreRef	String	N	The depository's wire transfer reference of the deposit or withdrawal associated with the transaction, e.g. Fedwire OMAD or SWIFT OSN.	
TradeDate	TrdDt	LocalMktDate	N	Indicates date of trade of the security associated this message in YYYYMMDD format. Needed to match the pledge with the broker's message to the custodian.	
TransactionID	TxnID	String	N	The service provider's (CCP's) underlying transaction identifier.	
FirmTransactionID	FirmTxnID	String	N	The submitter's (Clearing Firm's) underlying transaction identifier.	
Text	Txt		N	Conditionally required when @RespType = 3 (Rejected) or @RespType = <tbd> (Completed with warning). Elaboration of the reason for rejection or warning.	
Component <Header>	Hdr			See above.	
Component <Parties>	Pty				
→ PartyID	ID		N	Used to identify the party.	
→ PartyIDSource	Src		N	Used to identify class source of PartyID value (e.g. BIC).	B = BIC D = Proprietary (e.g. Alias) H = Clearing House member code
→ PartyRole	R		N	Identifies the type of PartyID (e.g. Executing Broker).	4 = Clearing firm 21 = Clearing organization 28 = Custodian - the custodial bank where the asset account is held 101 = Collateral asset account - identifies the client's asset account

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	FIXML Name	Data Type	Rq'd	Description	Supported Values
→ Component <PtysSubGrp>	Sub				
→ → PartySubID	ID		N		For @Typ = 4 CLR = collateral for normal initial margin SECR = collateral for guarantee fund For @Typ = 43 CSEG = customer segregated CNSEG = customer non-segregated COTC = customer cleared swaps NSEG = non-segregated, house/proprietary For @Typ = 26 PB = SECR = DELIV = For @Typ = 44 CDS = credit default swaps IRS = interest rate swaps DFLT = base guarantee fund
→ → PartySubIDType	Typ		N		4 = Application - used to distinguish between asset accounts that have different processing requirements (i.e. business function) 11 = Registration number (for settlement instructions – the standing instruction profile identifier) 26 = Position account type 43 = Funds segregation type 44 = Guarantee fund
End <Sub> component					
End <Pty> component					
Component	Instrmt		N		

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	FIXML Name	Data Type	Rq'd	Description	Supported Values
<Instrument>					
SecurityID	ID		N	Conditionally required when depositing or withdrawing a non-cash instrument.	
SecurityIDSource	Src		N	Conditionally required when SecurityID is specified.	1 = CUSIP 4 = ISIN L = Letter of Credit
SecAltIDGrp	AID		*N*	Number of alternate Security Identifiers	
SecurityType	SecTyp		Y	Specifies whether the collateral is "cash" or "security". "SEC" is used in requests and response.	CASH = cash collateral LOFC = letter of credit collateral SEC = security collateral
CouponPaymentDate	CpnPmt		N	Date interest is to be paid. Used in identifying Corporate Bond issues.	
PassThruIndicator	PassThru	Boolean	N	Used to flag a Letter of Credit as "Pass Thru".	Y = Pass through N = Not pass through
AssetClass	AssetClss	int	N	The broad asset category for assessing risk exposure.	4 = Equity 5 = Commodity tbd = Cash tbd = Debt tbd = Investment program tbd = Loan facility tbd = Specialized account program

AssetSubClass	AssetSubClss	int	N	The subcategory description of the asset class.	Equity:
					  9 = Common
					  10 = Preferred
					Commodity:
					  14 = Bullion
					  tbd = Warehouse receipts
					Cash: N/A
					Debt:
					  tbd = Bill
					  tbd = Bond
					  tbd = Note
					  tbd = Floating rate note
					  tbd = Strip
					  tbd = Index linked

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
					tbd = Discount note
					tbd = Mortgage backed
					tbd = Benchmark note
					Investment program: N/A
					Letter of Credit: N/A
					Specialized account program:
					tbd = Securitized
					tbd = Corporates
					tbd = Lockup
AssetType	AssetTyp	String	N		Equity:
					Stock
					ETF
					Commodity:
					Gold
					Cash:
					Cash
					Debt:
					German T-Bill
					French T-Bill
					UK T-Bill
					Canadian T-Bill
					US T-Bill
					JBG
					UK Gilt
					Bunde
					Canadian Bond
					US T-Bond
					French T-Note
					US T-Note
					US T-FRN
					US T-Strip
					US TIPS
					FFCB Discount Note
					FHLB Discount Note
					FRE Discount Note
					FNMA Discount Note
					Fannie Mortgage Backed
					Freddie Mortgage Backed
					Ginnie Mortgage Backed

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
					FNMA Coupon
					FFCB Coupon
					FHLB Coupon
					FRE Coupon
					Investment program:
					IEF2
					IEF5
					Fed Cash
					Letter of Credit:
					LOC
					Specialized account program:
					IEF3
					IEF4
					Quad Party
					Tri Party
IssueDate	Issued		N	Date the instrument was issuedRequired for Letters of Credit.	
MaturityDate				Date the instrument matures. Required for Letters of Credit, optional for Bonds	
PriceQuoteCurrency	PxQteCcy		N	Currency of the asset in which the price is quoted.	ISO 4217 3-character currency code.
CouponRate	CpnRt		N	Annual coupon rate for the instrument	
Issuer	Issr		N	Issuer of the Bond, issuing bank for Letter of Credit.	
DatedDate	Dated		N	For Letter of Credit gives the date of the last amendment if applicable.	
Component <InstrumentParties>	*Pty*				
→ *InstrumentPartyID*	ID		N	Used to identify the party.	
→ *InstrumentPartyIDSource*	Src		N	Used to identify class source of PartyID value	D = Proprietary
→ *InstrumentPartyRole*	R		N	Identifies the role of PartyID	110 = Borrower, i.e. Letter of Credit Applicant
End <Pty> component					
End <Instrmt> component					
Component <CollateralAmountGrp>	*CollAmt*				
→ CurrentCollateralA	Amt		N	The market value of the	

CollateralResponse (MsgTyp = AZ) <CollRsp>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
mount				collateral denominated in CollateralCurrency.	
→ CollateralCurrency	Ccy		N	Currency of the collateral.	
→ HaircutIndicator	HrctInd		N	Indicates, whether stated valuation includes a haircut, e.g. that the stated value reflects the subtraction of the haircut. Note that a value of "N" does not imply a haircut is not applicable, only that the haircut (if any) is not reflected in the stated valuation.	Y = Valuation includes a haircut N = Valuation does not include a haircut
→ CollateralPortfolioID	PrtflioID	String	N	Code identifying the collateral portfolio when reporting on a portfolio basis.	
End <CollAmt> component					
End <CollRsp> message					

4.5 BusinessMessageReject

Usage:

The BusinessMessageReject message is used to reject an application-level message which fulfills session-level rules but whose content cannot be rejected via the proper response message. Note that if the application-level message fails a session-level rule (e.g. body length is incorrect), a session-level Reject (35=3) message is returned instead.

In the event a business message is received, fulfills session-level rules, but fails high-level schema validation a BusinessMessageReject is returned with a BusinessRejectReason and Text describing the validation failure. Such failures might include invalid XML formatting, elements or required attributes missing or out of order, or invalid values in CollAsgnTransType or CollAsgnReason.

Response Message:

None

Table 5: BusinessMessageReject message

BusinessMessageReject (MsgTyp = j) <BizMsgRej>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
RefSeqNum	RefSeqNum	SeqNum	Y	MsgSeqNum of rejected message	

BusinessMessageReject (MsgTyp = j) <BizMsgRej>					
Field Name	**FIXML Name**	**Data Type**	**Rq'd**	**Description**	**Supported Values**
RefMsgType	RefMsgTyp	String	Y	The MsgType of the FIX message being referenced.	AY = CollateralAssignment
BusinessRejectRefID	BizRejRefID	String	N	Conditionally required unless the corresponding ID field for the message was missing.	Suggested fields of the message being rejected are: CollateralAssignment - CollAsgnID
BusinessRejectReason	BizRejRsn	int	Y	Code to identify reason for a Business Message Reject message.	0 = Other 1 = Unknown ID 2 = Unknown Security 3 = Unsupported Message Type 4 = Application not available 5 = Conditionally required field missing 6 = Not Authorized
Text	Txt	String	Y	Further explanation of reason for reject. As many reasons for reject will be communicated here as practical.	
Component <Header>	*Hdr*			See above.	
End <BizMsgRej> message					

5 Message Samples

5.1 Deposit Request for Cash

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollAsgn
        ID="ABC1234"                 ID of this transaction
        BizDt="2014-06-24"           Business date
        TxnTm="2014-06-24T18:40:43"  Transaction timestamp
        WreRef="12345678"            Wire reference
        TransTyp="0"                 New request
        AsgnRsn="3"                  Deposit
        Qty="10000000">             Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>       Clearing organization
<Pty ID="111" R="4" Src="H"/>        Clearing member firm ID
<Pty ID="111S" R="101" Src="H">      Asset account
        <Sub ID="SECR" Typ="26"/>    Position account type
        <Sub ID="COTC" Typ="43"/>    Funds segregation type
        <Sub ID="CDS" Typ="44"/>     Guarantee fund
        <Sub ID="CLR" Typ="4"/>      Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">     Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="CITIUS4C" R="28"/>          Destination BIC
<Instrmt
        SecTyp="CASH"                Specific asset
        PxQteCcy="EUR"/>             Currency of denomination
</CollAsgn>
</FIXML>
```

5.2 Deposit Request for German Government Bond

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollAsgn
        ID=""ABC1234""                          ID of this transaction
        BizDt=""2014-06-24""            Business date
        TxnTm="2014-06-24T18:40:43"    Transaction timestamp
        TransTyp="0"                   New request
        AsgnRsn="3"                    Deposit
        Qty="10000000">                Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>         Clearing organization
<Pty ID="111" R="4" Src="H"/>          Clearing member firm ID
<Pty ID="111S" R="101" Src="H">        Asset account
        <Sub ID="SECR" Typ="26"/>      Position account type
        <Sub ID="COTC" Typ="43"/>      Funds segregation type
        <Sub ID="CDS" Typ="44"/>       Guarantee fund
        <Sub ID="CLR" Typ="4"/>        Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">       Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="CITIUS4C" R="28"/>            Destination BIC
<Instrmt
        SecTyp="SEC"                   Specific asset
        PxQteCcy="EUR"                 Currency of denomination
        ID="1234567890"                ISIN
        Src="4"/>                      ID is an ISIN
</CollAsgn>
</FIXML>
```

5.3 Withdrawal Request for Cash

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollAsgn
        ID="ABC1234"                     ID of this transaction
        BizDt="2014-06-24"               Business date
        TxnTm="2014-06-24T18:40:43"      Transaction timestamp
        TransTyp="0"                     New request
        AsgnRsn="4"                      Withdrawal
        Qty="10000000">                  Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>           Clearing organization
<Pty ID="111" R="4" Src="H"/>            Clearing member firm ID
<Pty ID="111S" R="101" Src="H">          Asset account
        <Sub ID="SECR" Typ="26"/>        Position account type
        <Sub ID="COTC" Typ="43"/>        Funds segregation type
        <Sub ID="CDS" Typ="44"/>         Guarantee fund
        <Sub ID="CLR" Typ="4"/>          Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">         Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="CITIUS4C" R="28"/>              Destination BIC
<Instrmt
        SecTyp="CASH"                    Specific asset
        PxQteCcy="EUR"/>                 Currency of denomination
</CollAsgn>
</FIXML>
```

5.4 Withdrawal Request for German Government Bond

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollAsgn
        ID="ABC1234"                  ID of this transaction
        BizDt="2014-06-24"            Business date
        TxnTm="2014-06-24T18:40:43"   Transaction timestamp
        TransTyp="0"                  New request
        AsgnRsn="4"                   Withdrawal
        Qty="10000000">               Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>        Clearing organization
<Pty ID="111" R="4" Src="H"/>         Clearing member firm ID
<Pty ID="111S" R="101" Src="H">       Asset account
        <Sub ID="SECR" Typ="26"/>     Position account type
        <Sub ID="COTC" Typ="43"/>     Funds segregation type
        <Sub ID="CDS" Typ="44"/>      Guarantee fund
        <Sub ID="CLR" Typ="4"/>       Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">      Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="CITIUS4C" R="28"/>           Destination BIC
<Instrmt
        SecTyp="SEC"                  Specific asset
        PxQteCcy="EUR"                Currency of denomination
        ID="1234567890"               ISIN
        Src="4"/>                     ID is an ISIN
</CollAsgn>
</FIXML>
```

5.5 Business Message Reject of Withdrawal Request for German Government Bond

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<BizMsgRej
        RefSeqNum="123456"              Sequence number of the message being rejected
        RefMsgTyp="AY"                  Message type of the message being rejected
        BizRejRefID="ABC1234"           ID of the transaction as sent by the firm
        BizRejRsn="5"                   Conditionally required field missing
        Txt="AsgnRsn missing or invalid"/>
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
</FIXML>
```

5.6 Reject of Withdrawal Request for German Government Bond

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollRsp
        ID="ABC1234"                    ID of the transaction as sent by the firm
        BizDt="2014-06-24"              Business date
        RespID="12345668"              Report ID for this response
        TxnTm="2014-06-24T18:40:43"     Transaction timestamp
        AsgnRsn="4"                     Withdrawal
        SettlDt="2014-06-26"            Value date of the transaction
        RespTyp="3"                     Request rejected
        RejRsn="3"                      Insufficient collateral to support withdrawal
        Qty="10000000">                 Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>          Clearing organization
<Pty ID="111" R="4" Src="H"/>           Clearing member firm ID
<Pty ID="111S" R="101" Src="H">         Asset account
        <Sub ID="SECR" Typ="26"/>       Position account type
        <Sub ID="COTC" Typ="43"/>       Funds segregation type
        <Sub ID="CDS" Typ="44"/>        Guarantee fund
        <Sub ID="CLR" Typ="4"/>         Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">        Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="111S" R="91" Src="H"/>         Settlement account
<Pty ID="CITIUS4C" R="28" Src="B"/>     Destination BIC
<Instrmt
        SecTyp="SEC"                    Specific asset
        PxQteCcy="EUR"                  Currency of denomination
        ID="1234567890"                 ISIN
        MatDt="06-03-2015"              Maturity date
        CpnRt="0.0625"                  Coupon rate
        Src="4"                         ID is an ISIN
        AssetClss="tbd"                 Debt
```

```
        AssetSubClss="tbd"           Bond
        AssetTyp="Bunde"/>
</CollRsp>
</FIXML>
```

5.7 Response for Withdrawal Request for German Government Bond – Pending

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollRsp
        ID="ABC1234"                 ID of the transaction as sent by the firm
        BizDt="2014-06-24"           Business date
        RespID="12345668"            Report ID for this response
        TxnTm="2014-06-24T18:40:43"  Transaction timestamp
        AsgnRsn="4"                  Withdrawal
        RespTyp="tbd"                Request accepted, passed validations and  is pending
        SettlDt="2014-06-26"         Value date of the transaction
        Px="105.23"                  Asset price
        PxTyp="1"                    Percent of par
        Qty="10000000">              Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>       Clearing organization
<Pty ID="111" R="4" Src="H"/>        Clearing member firm ID
<Pty ID="111S" R="101" Src="H">      Asset account
        <Sub ID="SECR" Typ="26"/>    Position account type
        <Sub ID="COTC" Typ="43"/>    Funds segregation type
        <Sub ID="CDS" Typ="44"/>     Guarantee fund
        <Sub ID="CLR" Typ="4"/>      Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">     Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="111S" R="91" Src="H"/>      Settlement account
<Pty ID="CITIUS4C" R="28" Src="B"/>  Destination BIC
<Instrmt
        SecTyp="SEC"                 Specific asset
        PxQteCcy="EUR"               Currency of denomination
        ID="1234567890"              ISIN
        MatDt="06-03-2015"           Maturity date
        CpnRt="0.0625"               Coupon rate
        Src="4"                      ID is an ISIN
        AssetClss="tbd"              Debt
        AssetSubClss="tbd"           Bond
        AssetTyp="Bunde"/>
<CollAmt                             Haircutted market value of asset
        HrctInd="Y"
        Amt="9600000.00"
        Ccy="EUR"/>
<CollAmt                             Unhaircutted market value of asset
```

```
        HrctInd="N"
        Amt="9800000.00"
        Ccy="EUR"/>
</CollRsp>
</FIXML>
```

5.8 Response for Withdrawal Request for German Government Bond – Confirmed

Note the addition of the SettlDt attribute to tell you the value date of the release.

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollRsp
        ID="ABC1234"                        ID of the transaction as sent by the firm
        BizDt="2014-06-24"                  Business date
        RespID="12345668"                   Report ID for this response
        TxnTm="2014-06-24T18:40:43"         Transaction timestamp
        AsgnRsn="4"                         Withdrawal
        RespTyp="1"                         Request confirmed
        SettlDt="2014-06-26"                Value date of the transaction
        Px="105.23"                         Asset price
        PxTyp="1"                           Percent of par
        Qty="10000000">                     Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="D"/>             Clearing organization
<Pty ID="111" R="4" Src="H"/>              Clearing member firm ID
<Pty ID="111S" R="101" Src="H">            Asset account
        <Sub ID="SECR" Typ="26"/>          Position account type
        <Sub ID="COTC" Typ="43"/>          Funds segregation type
        <Sub ID="CDS" Typ="44"/>           Guarantee fund
        <Sub ID="CLR" Typ="4"/>            Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">           Transaction profile (standing settlement instructions)
</Pty>
<Pty ID="111S" R="91" Src="H"/>            Settlement account
<Pty ID="CITIUS4C" R="28" Src="B"/>        Destination BIC
<Instrmt
        SecTyp="SEC"                       Specific asset
        PxQteCcy="EUR"                     Currency of denomination
        ID="1234567890"                    ISIN
        MatDt="06-03-2015"                 Maturity date
        CpnRt="0.0625"                     Coupon rate
        Src="4"                            ID is an ISIN
        AssetClss="tbd"                    Debt
        AssetSubClss="tbd"                 Bond
        AssetTyp="Bunde"/>
<CollAmt                                   Haircutted market value of asset
        HrctInd="Y"
        Amt="9600000.00"
        Ccy="EUR"
        PrtflioID="ABCDEFG"/>
<CollAmt                                   Unhaircutted market value of asset
        HrctInd="N"
        Amt="9800000.00"
```

```
        Ccy="EUR"
        PrtflioID="ABCDEFG"/>
</CollRsp>
</FIXML>
```

5.9 Response for a rejected request

```
<FIXML v="5.0 SP2" xv="162" cv="CME.0001">
<CollRsp
        ID="ABC1234"                   ID of the transaction as sent by the firm
        BizDt="2014-06-24"             Business date
        RespID="12345668"             Report ID for this report
        TxnTm="2014-06-24T18:40:43"   Transaction timestamp
        TransTyp="0"                   New request
        AsgnRsn="4"                    Withdrawal
        RespTyp="3"                    Request rejected
        SettlDt="2014-06-26"           Value date of the transaction
        RejRsn="1"                     Rejection reason // no such security on deposit
        Txt="NO SUCH SECURITY ON DEPOSIT"
        Qty="10000000">                Face amount
        <Hdr SID="CME" SSub="CMEBAMS" TID="TARGET" TSub="User123" Snt="2014-07-
        23T18:40:43">
<Pty ID="CME" R="21" Src="H"/>        Clearing organization
<Pty ID="111" R="4" Src="H"/>         Clearing member firm ID
<Pty ID="111S" R="101" Src="H">       Asset account
        <Sub ID="SECR" Typ="26"/>     Position account type
        <Sub ID="COTC" Typ="43"/>     Funds segregation type
        <Sub ID="CDS" Typ="44"/>      Guarantee fund
        <Sub ID="CLR" Typ="4"/>       Collateral to cover normal clearing IM requirement
        <Sub ID="DFLT" Typ="11">      Transaction profile (standing settlement instructions)
</Pty>
<Instrmt
        SecTyp="SEC"                   Specific asset
        PxQteCcy="EUR"                 Currency of denomination
        ID="1234567890"                ISIN
        Src="4"/>                      ID is an ISIN
</CollRsp>
</FIXML>
```

6 Revision History

Version	Date	Author	Description
0.1	March 6, 2014	LT, DK	Initial version
0.2	March 17, 2014	LT	Updated based on reviews. Updated flow diagrams to show "pending" transaction status. Added AttachmentGrp component to CollateralAssignment and expanded SettlInstructionsData component. Added RateSource to CollateralResponse. Swapped out Currency in favor of PriceQuoteCurrency in <Instrument>. Updated sample messages.
0.3	March 31, 2014	LT, DK	Removed fields and components that are not needed in this implementation. Moved questions, notices and issues to the Open Issues table below. Added a number of fields to <Instrument> for LofC.
0.6	June 13, 2014	DK	Added a number of new fields requested by the business.
0.7	July 14, 2014	DK	Revised flow diagrams based on feedback. Added BMR to flows and message table. Revised <Pty> elements in message samples. Removed "received" response. Extended AssetClass, AssetSubclass and AssetType per discussion. Added sample BMR and another CollResp reject. Replaced " in samples with ".
0.8	July 21, 2014	DK	Removed Txt from CollAsgn. Added @Src to all the <Pty> elements in the sample messages.Added <Sub Typ="26" .../> to all the sample messages.Fixed spelling of @CpnRt.Added SettlDt to all the response responses. Beefed up the descriptions so that it's clear both fields are required under the same condition. Added a new value to RespTyp (Completed with warning) that also requires Text.Added WreRef to the sample. Added a new field FirmTransactionID to both messages so that the submitter and CME won't be using the same field.

Version	Date	Author	Description
0.9	July 28, 2014	DK	Added <FIXML> attributes and the <HDR element>