CME Group
A CME/Chicago Board of Trade/NYMEX Company

CME ClearPort® API

CME Repository Services
Trade Reporting API - Commodities

Version: 1.0

Contents

1 Background

The Commodity Futures Trading Commission (‘‘Commission or CFTC’’) is proposing rules to implement new statutory provisions enacted by Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act. These proposed rules apply to swap data recordkeeping and reporting requirements for Swap Data Repositories (SDR), derivatives clearing organizations (DCO), designated contract markets (DCM), swap execution facilities (SEF), swap dealers (SD), major swap participants (MSP), and swap counterparties (SP) who are neither swap dealers nor major swap participants.

As part of these Dodd-Frank rulemakings, CFTC has mandated that all OTC swaps, whether cleared or not, be reported to a SDR. In order to facilitate such SDR reporting on behalf of market participants, CMEG will be launching its own Swaps Data Repository Service (hereafter referred to as “CME Repository Service” or CME RS).

2 Introduction

Reporting counterparties and SEFs can report to the CME RS to fulfill their reporting obligations. CME’s SDR service will streamline the reporting process by allowing the market to leverage existing connectivity points and operational processes to facilitate regulatory reporting. In particular, reporting parties will be able to avoid multiple connections for clearing, reporting and instead leverage a single API (ClearPort API) for clearing and SDR Reporting through CME. Additionally, the CME RS will allow CME to seamlessly manage all ongoing SDR reporting obligations for CME cleared trades (valuation, continuation data, lifecycle events, etc.).

2.1 Prerequisites

This document assumes that users have a basic understanding of XML and some familiarity with trade reporting models.

3 Connectivity to CME Repository

This section describes the various connectivity options available to report to the CME Repository.

3.1 MQ Connectivity

Customers will have the option of connecting over a secure network connection via Websphere MQ Series. Customers can submit messages through a remote queue while having message responses pushed to their local queue. MQ Series clients do not require user authentication since MQ is a secure method of transport.

For more information on MQ connectivity, refer to:
http://www.cmegroup.com/globex/files/connectivityoptions.pdf

3.2 Web Services Connectivity (HTTP)

Customers have the option of connecting using HTTPS via the Internet, Lease Line, and/or VPN. HTTP v.2.0 access supports both session-less and session-based user authentication. CME ClearPort® API supports

- Session-less HTTP Client
- Session-based HTTP Client

3.2.1 User Authentication (HTTP Only)

Session-less HTTP Client
HTTP users opting for session-less authentication must embed their CME ClearPort® API username and password in the Basic HTTP header of each message.

To do this, represent the username and password pair with a colon separating them (i.e.; Username:Password), then convert the string to base64.

For example:
Authorization: Basic QWxhZGRpbjpvcGVuIHNlc2FtZQ==

Session based HTTP Client

Session-based HTTP clients must use the FIXML Application-level User Request and User Response Messages. The API validates customer connections through session-based HTTP using a valid username and password. Responses are sent back to acknowledge a successful login or to convey a logon error. The User Request and User Response messages are used for the user connection messaging. Connections persist using cookies.

3.2.2 Password Changes

Password changes are also supported for HTTP users. Password changes use the FIXML Application-level User Request Message with an appropriate User Request Type.

Passwords expire every 45 days, so customers must implement the change password FIXML message.

Passwords must:

- Have a minimum of 8 characters and maximum of 20 characters,
- Not be a previously used password, and
- Contain at least 3 out of the following 4:

    - at least one UPPER CASE character;
    - at least one lower case character;
    - at least one numeric character;
    - at least one non-alphanumeric character.

4 Trade Reporting Flows

This section describes the flows associated with reporting creation data and Continuation data to CME RS.

4.1 Creation Data Reporting Flows

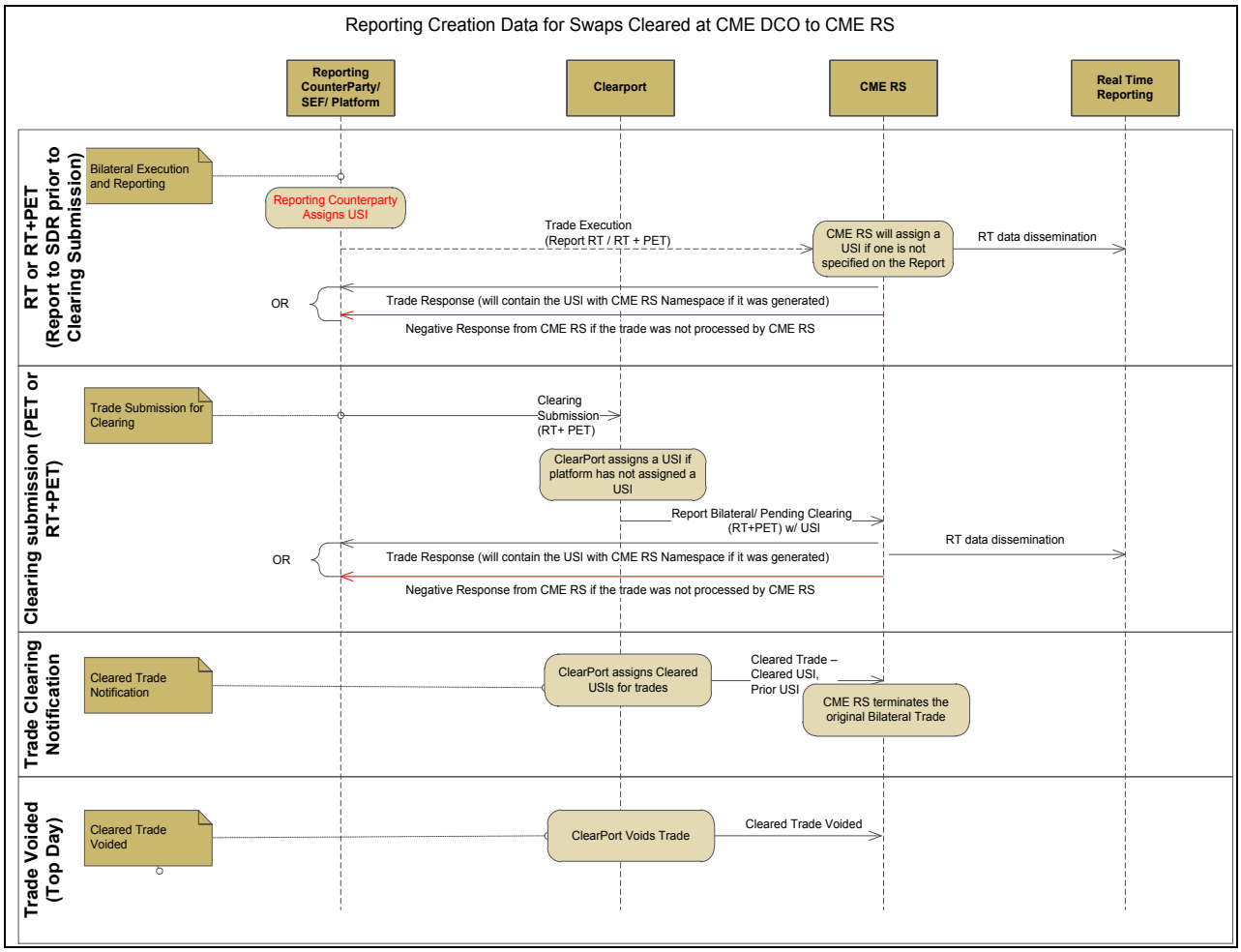
Creation Data Reporting
CFTC requires reporting of two types of data relating to the creation of a swap:

- the primary economic terms of the swap verified or matched by the counterparties at or shortly after the time of execution;
- and all of the terms of the swap included in the legal confirmation of the swap.

Universal Swap Identifier (USI)
The USI is a unique identifier assigned to all swap transactions which identifies the transaction (the swap and its counterparties) uniquely throughout its duration. The creation and use of the USI has been mandated by the CFTC and SEC as part of the Dodd-Frank Act.

4.1.1 Reporting creation data for swaps cleared at CME

The following flow describes the reporting of RT (Realtime) and PET (Primary Economic Terms) for trades that are submitted to CME Clearing using the ClearPort API. Participants can leverage the ClearPort API to fulfill their reporting obligations certain additional attributes like the execution SDR and the regulatory report type. Clearport API will send appropriate messages to CME RS.



4.1.2 Reporting Contingent EFRP trades cleared at CME

Contingent EPRPs are privately negotiated EFR/ EFS/EFP/EOO trades which are contingent on clearing of the corresponding futures trade. Once the futures trade clears, the swap trade ceases to exist. These swaps that are in existence for a brief period of time will have to be real time reported. If the futures trade does not clear, the swap is not reportable. They are terminated as soon as the EFS trade is cleared. CME does not distinguish between EFS, EFR, EFP or EOO trades.

Non- contingent EFRP trades are treated like any other swaps trades and will be marked as non-contingent. Basically these are Swaps that have existed in the books and the participant may enter into an EFR trade to hedge against the Swap position. CME RS will book these trades as any other bilateral swap trade and take care of the necessary reporting. The trade type will indicate that this is an EFR/EFS trade. They can come directly from the participant or from ClearPort.

An **EFP** transaction involves a privately negotiated and simultaneous exchange of a futures position for a corresponding position in the underlying physical.

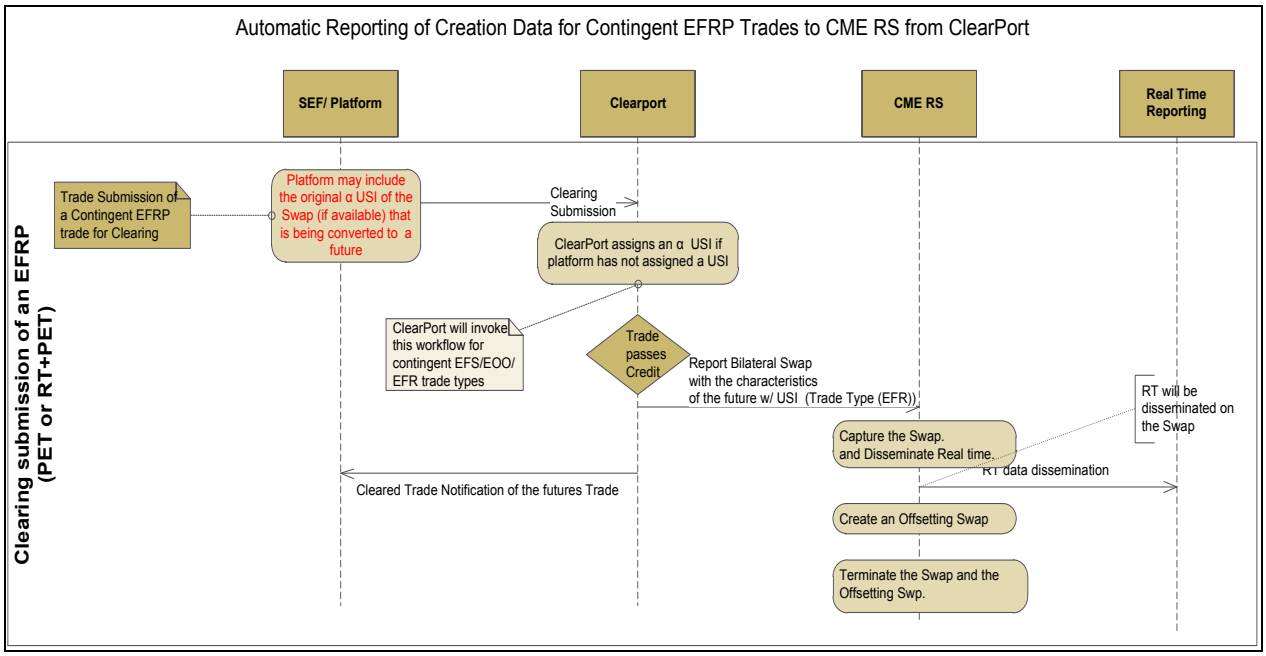
An **EFR or EFS** transaction involves a privately negotiated and simultaneous exchange of a

futures position for a corresponding Over the Counter (OTC) swap or other OTC derivative in the same or related instrument.

An **EOO** transaction involves a privately negotiated and simultaneous exchange of an Exchange option position for a corresponding OTC option position or other OTC contract with similar characteristics in the same or a related instrument.

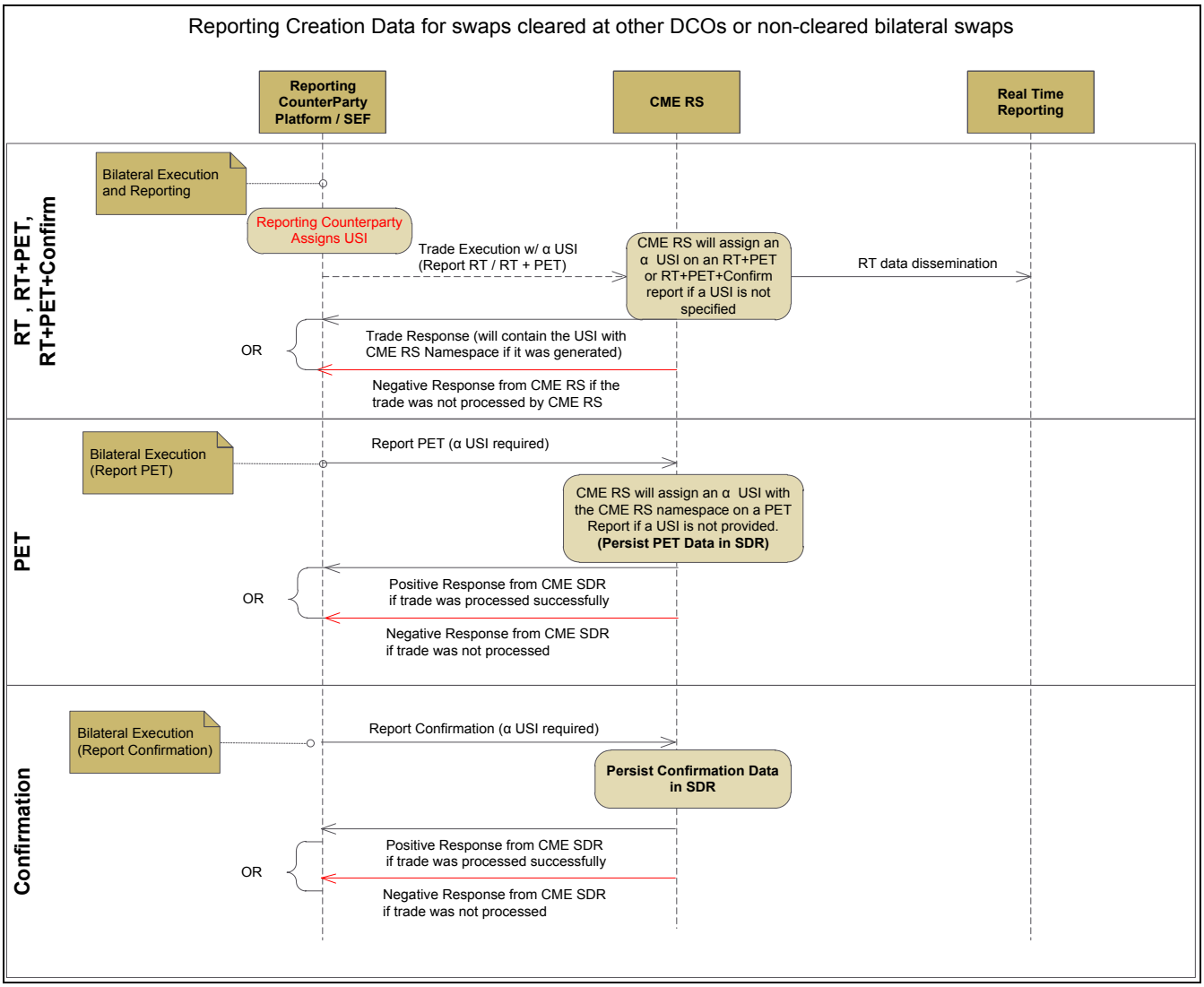
4.1.2.1 Automatic Reporting of creation data for Contingent EFRP trades to CME RS

These Swap trades will be reported to the CME RS by CME ClearPort as contingent Swap trades and will resemble the underlying EFR futures trades.



4.1.3 Reporting creation data for swaps cleared at other DCOs or non-cleared bilateral swaps

While reporting creation data for a swap that is being cleared elsewhere, or a bilateral swap that will not be cleared, a USI is required. The only exception to this is a vanilla RT Report which does not require submission of a USI. If the submitter does not specify a USI while reporting the creation data, CME RS will assign a bilateral (α) USI with the CME RS namespace and echo is back to the submitter. The submitter will need to send the bilateral (α) USI assigned by CME RS on any subsequent report submitted for the swap to the CME RS.



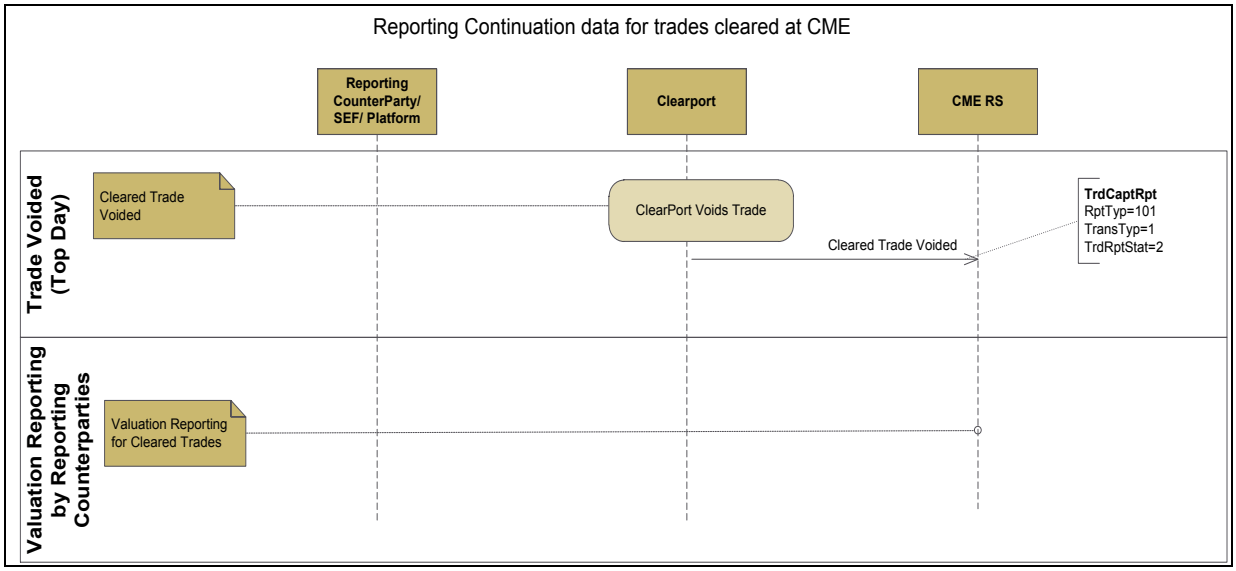
4.2 Continuation Data reporting flows

Continuation data reporting can be reported either using the life cycle approach, or using a snapshot approach.

- The life cycle approach involves reporting all life cycle events affecting the terms of a swap. This is reported only when the the event occurs.
- The snapshot approach requires reporting of a daily snapshot of all primary economic terms of a swap including any changes to such terms occurring since the previous snapshot.
- The continuation data reporting also includes reporting valuations which should be done daily.

4.2.1 Reporting continuation data for trades cleared at CME

All post trade activity of trades cleared at CME will be reported by CME DCO to the CME RS. These activities include voids, terminations, transfers and all other events mandated by the Commission. Reporting counterparties will have the option of reporting independent valuations of cleared trades directly to the DCO.

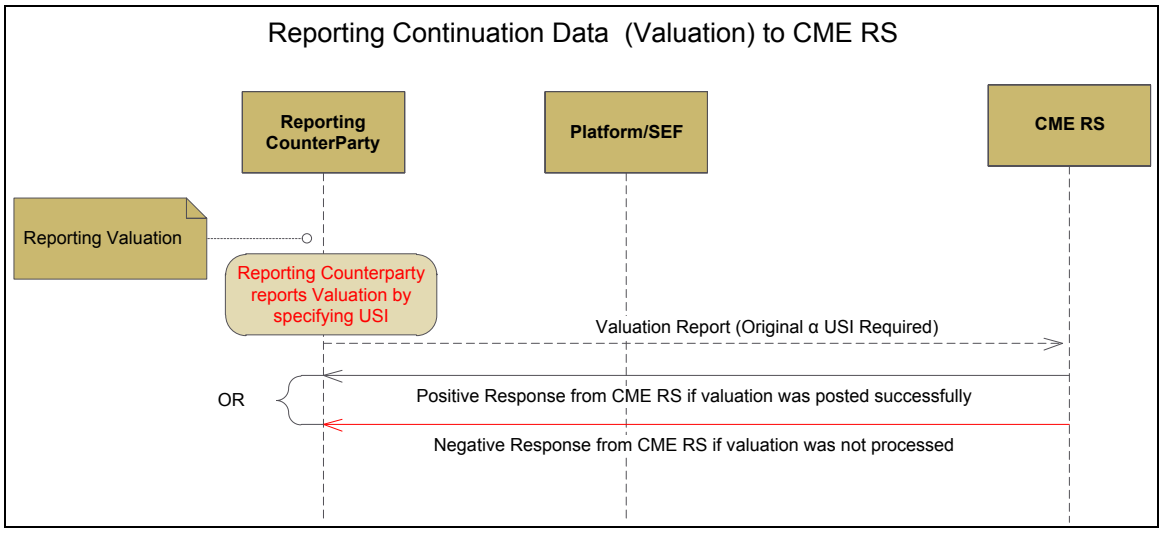


4.2.2 Reporting continuation data for all other trades (bilateral and cleared at other DCOs)

For trades that are not cleared at CME DCO, the Reporting counterparty will report all events that affect the swap and also provide daily valuation. The list of events supported by CME RS is defined below.

4.2.2.1 Reporting Valuations

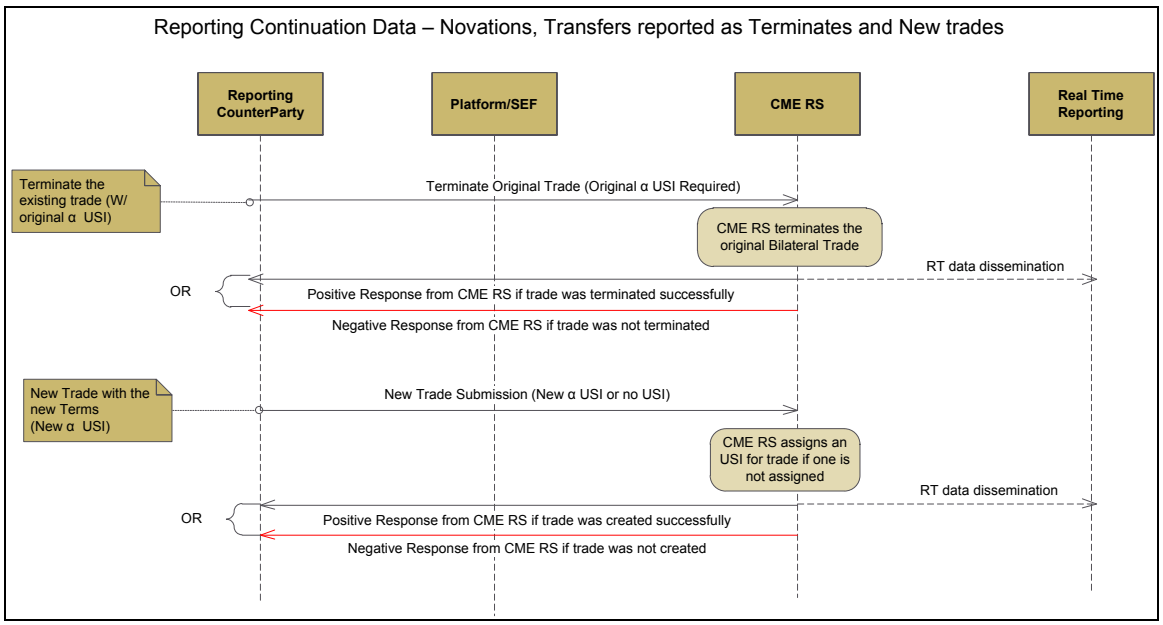
While reporting valuations, the original USI is required. Valuation Reports submitted without a USI will be rejected by CME RS.



4.2.2.2 Reporting Novations, Transfers as Terminates and New trades

Novations, Transfers can be reported by terminating the existing swap and reporting a new swap with the new counterparty. Participants may also choose to report amendments using this workflow where the original trade is terminated and a new trade is reported with the amended details.

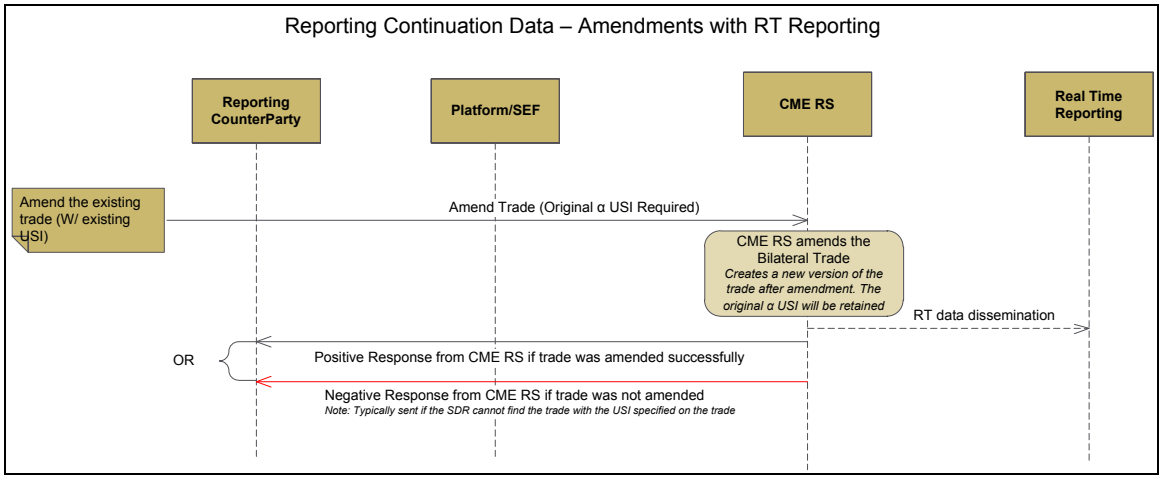
While reporting a termination, the original bilateral USI (α) is required. While reporting the new swap if a USI is not present, the CME RS will assign a USI with the CME RS namespace and echo it back on the confirm. The USI of the original swap that was terminated will be submitted as a prior USI in the new swap.



4.2.2.3 Reporting Amendments requiring RT

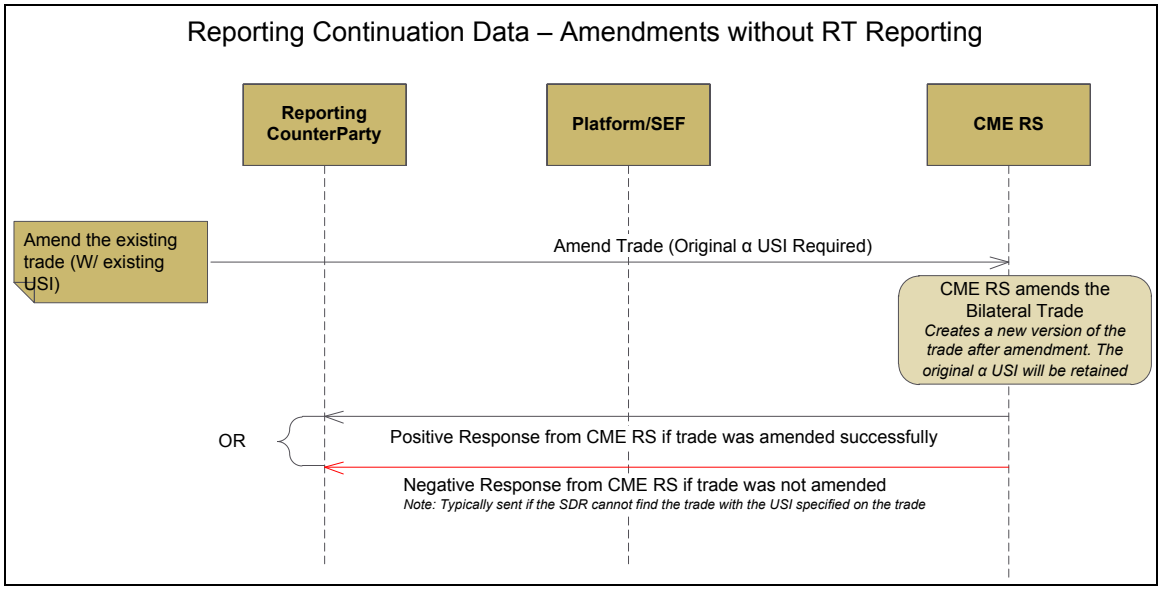
Participants can amend existing swaps. These amendments will needs to be reported as part of continuation reporting. The amendments will have to marked for RT reporting if the amendments affect the price forming data.

Additionally Novations and Transfers can be reported as amendments. While reporting any amendment, the original bilateral USI (α) is always required.



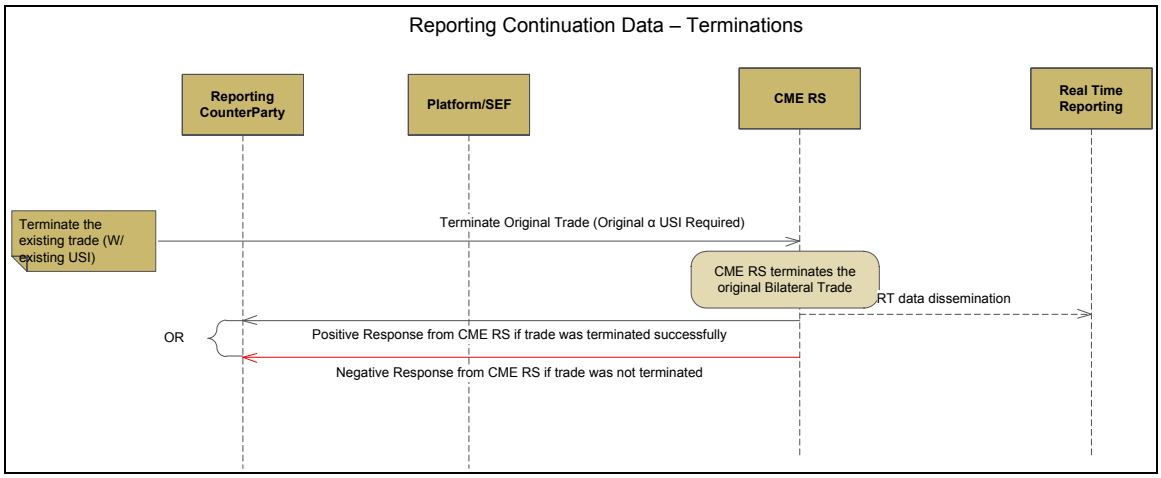
4.2.2.4 Reporting Amendments without RT

Participants can amend existing swaps. These amendments will needs to be reported as part of continuation reporting. Amendments that do not affect price will not need to be price reported.



4.2.2.5 Reporting Terminations

Terminations to existing swaps will need to be reported as part of continuation data reporting. All terminations will need to be price reported. Swaps may be terminated due to novations, transfers or options exercise. In all these cases, the terminations will need to be be price reported.



5 Trade Reporting Events

5.1 Creation data reporting

Event	Submission(s)	TrdCaptRpt/ TransTyp	TrdCaptRpt/RegRptTyp	TrdCaptRpt/ TrdContntn
New Trade	One or more submissions of RT, PET and Confirm data.	0 = New	0 = RT 1 = PET 3 = Confirm 4 = RT+PET 5 = PET+Confirm 6 = RT+PET+Confirm	None

5.2 Life cycle events reporting

Event based reporting is reporting of all life cycle events that affect the swap. This table lists all the events supported by CME RS for reporting Continuation data. These values will be used if a participant will be using event based reporting for an asset class.

Event	Submission(s)	TrdCaptRpt/ TransTyp	TrdCaptRpt/RegRptTyp	TrdCaptRpt/ TrdContntn
Valuation	Submission per USI for valuation data	0 = New	7 = Post-Trade Valuation	None
Novation (as Amendments)	Submission updating the novated party/obligation (USI on the novated trade will stay the same) If the reporting counterparty does not change.	2 = Replace	9 = Post Trade Event	0 = Novation
			10 = Post Trade Event + RT	
Novation (as Terminates and Adds)	Terminate the trade with the current USI	1 = Cancel	10 = Post Trade Event+ RT	0 = Novation
	Create a new trade with a new USI	0 = New	9 = Post Trade Event	0 = Novation
			10 = Post Trade Event + RT[1]	
Partial Novation	Submission updating the original swap with the reduced notional	2 = Replace	10 = Post Trade Event + RT	1 = Partial novation
	Submission for new trade with additional party	0 = New	10 = Post Trade Event + RT	1 = Partial novation
Swap Unwind	Submission unwinding swap	1 = Cancel	10 = RT+Post Trade	2 = Swap unwind

[1] A Post Trade event of 10 is sent if there were some fees/payments associated with the novation.

Event	Submission(s)	TrdCaptRpt/ TransTyp	TrdCaptRpt/RegRptTyp	TrdCaptRpt/ TrdContntn
Partial Swap Unwind (Decrease)	Submission updating swap (amending the trade for a lower amount)	2 = Replace	10 = RT+Post Trade Event	3 = Partial swap unwind
Exercise	Submission terminating option	1 = Cancel	10 = Post Trade Event + RT	4 = Exercise
	Submission for new swap from exercise (New USI)	0 = New	9 = Post Trade Event	4 = Exercise
Amendment	Submission updating amended swap	2 = Replace	9 = Post Trade Event (If not price affecting) 10 = RT+Post Trade Event (If price affecting)	8 = Amendment
Increase	Submission updating increasing the Swap Notional	2 = Replace	10 = RT+Post Trade Event (If price affecting)	9 = Increase
Withdrawal (Same as Swap Unwind)	Submission terminating swap	1 = Cancel	10 = RT+Post Trade Event (If price affecting)	15 = Withdrawal (Prior to confirmation or clearing)

6 FIXML Message Flows for Reporting Events

6.1 Reporting Creation Events Message Flow

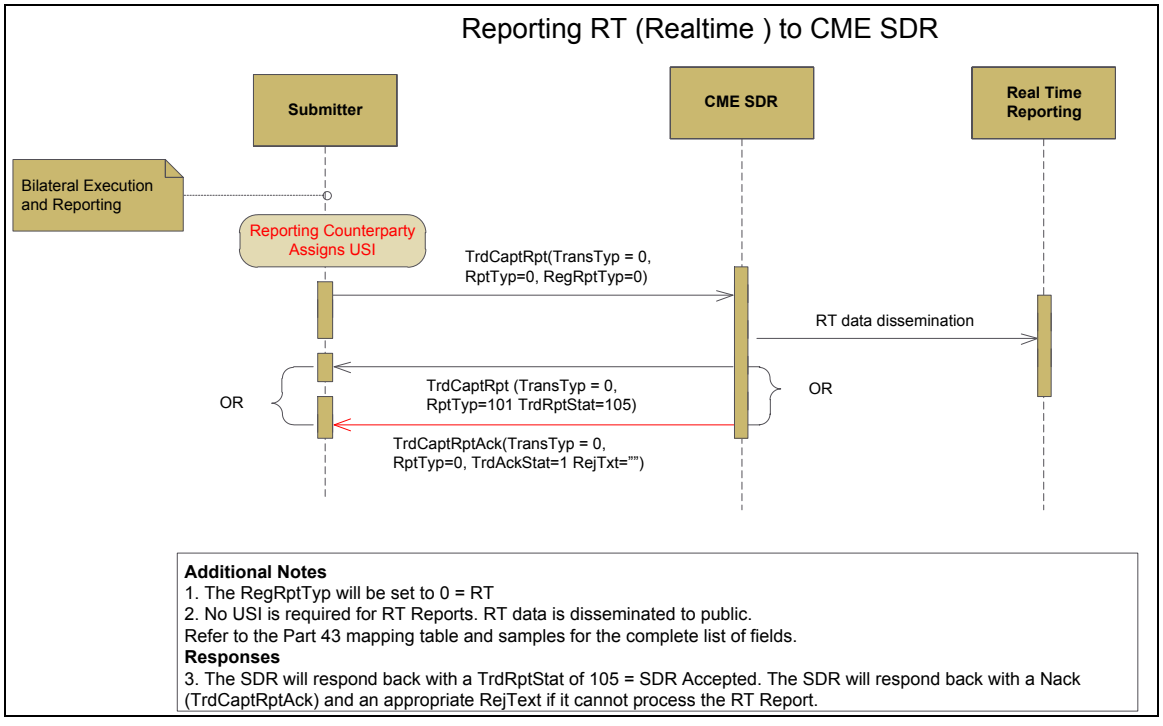
Creation data is the data associated with the creation and execution of the swap. This includes all the terms of the swap verified or matched by the counterparties at or shortly after the execution of the swap. This section describes all the flows associated with reporting creation data to CME RS.

6.1.1 Reporting RT for all trades to SDR

In this scenario, the participant submits a Part 43 Report for Realtime Reporting upon execution of a trade.

The steps are

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **RT** (0).
2. CME RS will record the report and disseminate the data to public.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of New (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.

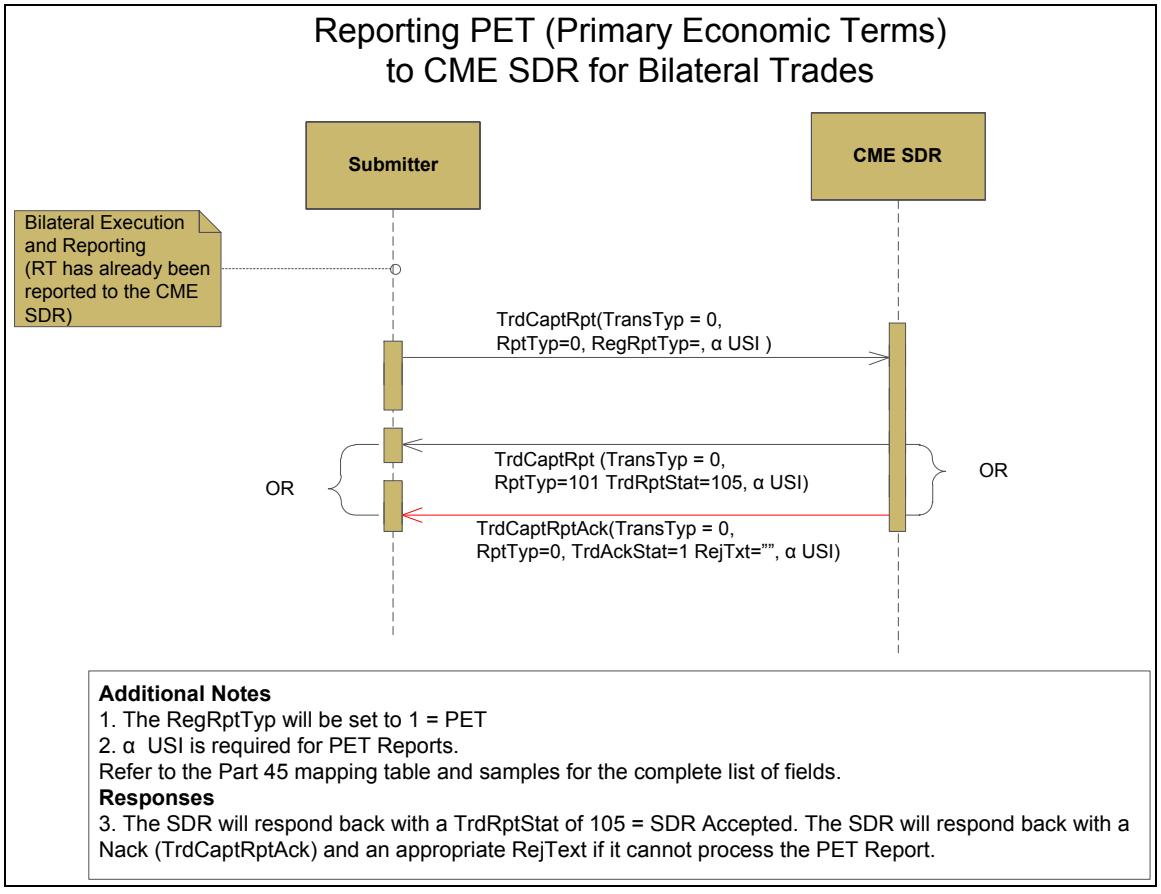


6.1.2 Reporting PET for all trades to CME RS

In this scenario, the participant submits a Part 45 Report for PET (Primary Economic Terms) Reporting. The Part 43 RT Report has already been submitted prior to this upon trade execution.

The steps are

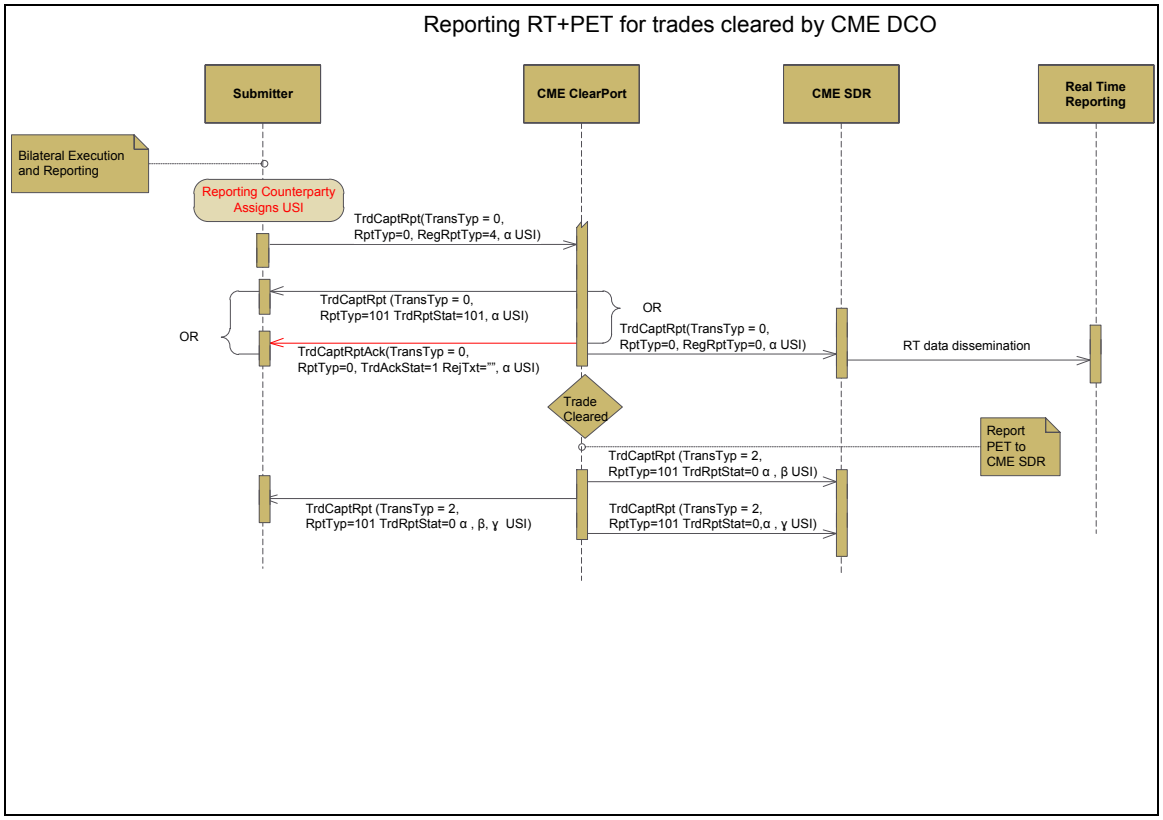
1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of PET (1). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: if an α USI has not been assigned to the report, CME RS will assign a USI using the CME RS namespace and echo it back on confirms to the participant.
2. CME RS will record the PET Report.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of New (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.



6.1.3 Reporting RT + PET for trades cleared at CME DCO

In this scenario the participant submits the trade to be cleared at CME DCO marking it for Real time reporting as well. Upon submission, the ClearPort API will report the RT to the CME RS. The steps are

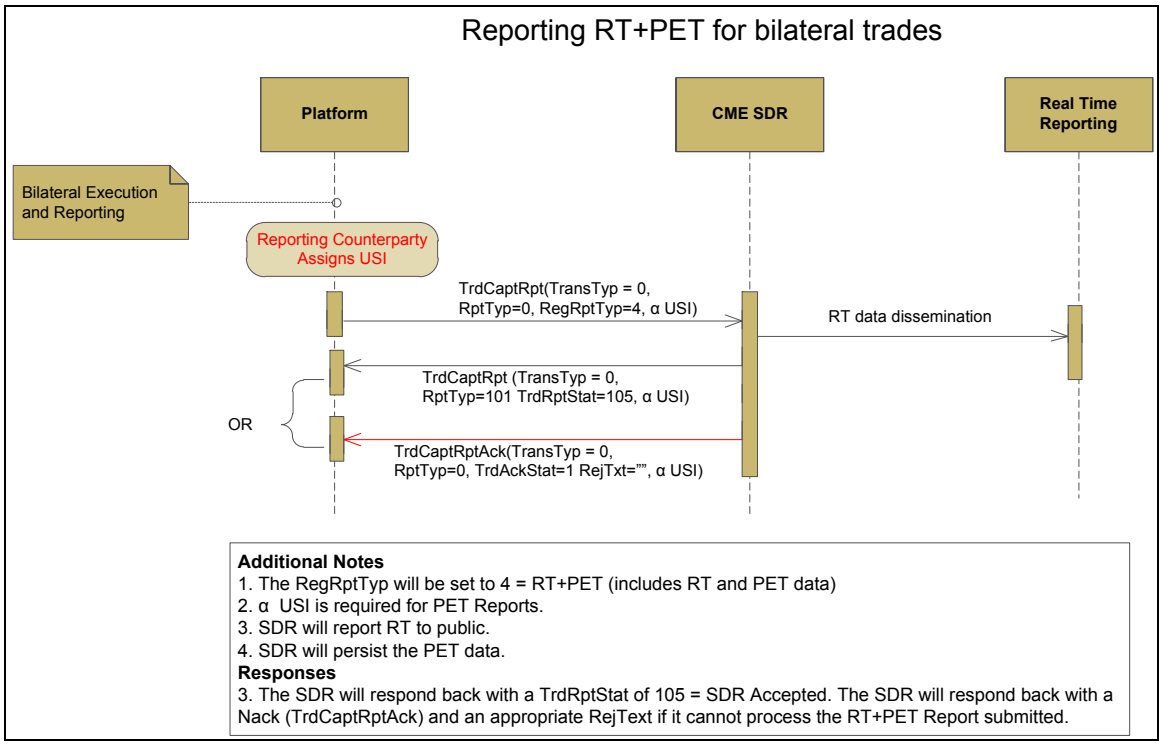
1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **RT** (4). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: if an α USI has not been assigned to the report, CME DCO will assign a USI using the CME DCO namespace and echo it back on confirms to the participant.
2. Upon Clearing, CME RS will record the PET Report for the two novated trades from clearing with a β and ɣ USI.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of New (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.



6.1.4 Reporting RT, PET and Confirmation for bilateral trades that will not clear

In this scenario, the participant submits a combined RT, PET and Confirmation Report to the CME RS.
The steps are

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **RT+PET+Confirm** (6). The participant includes the α USI in the **RegTrdID** block of the message.
2. Note: if an α USI has not been assigned to the report, CME RS will assign a USI using the CME RS namespace and echo it back on confirms to the participant.
3. CME RS will record the PET
4. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of New (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
5. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.



6.2 Reporting Continuation Events Message Flow

Continuation data is data associated with the continued existence of the swap until its final termination). This section describes the flows associated with reporting continuation data to CME RS.

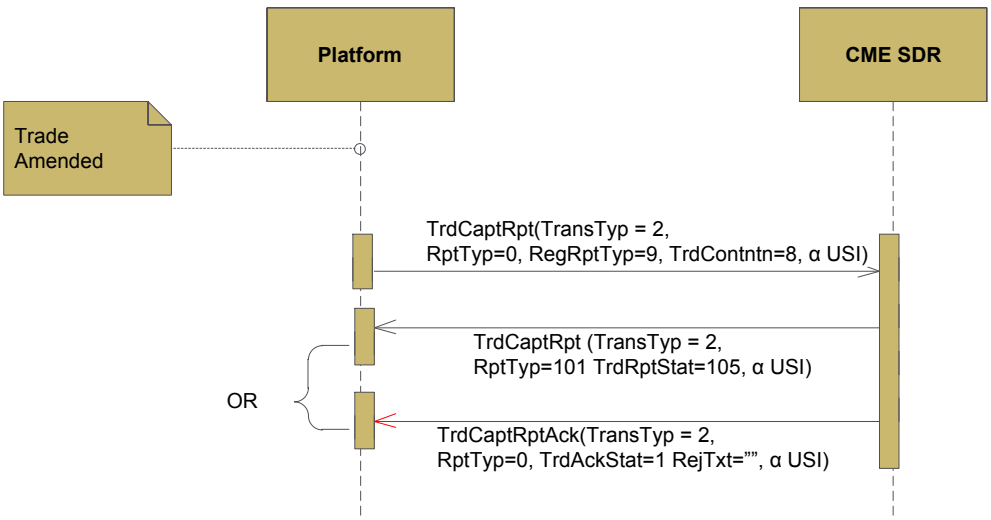
6.2.1 Reporting Amendments

In this scenario, the participant submits an amendment to a previously reported Swap. Swap amendments will need to be reported. Amendments may affect price affecting terms in which case RT data will have to be reported to the public.

Reporting Amendments that are not Price Forming

The steps are

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event** (9). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Amendment** (8). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.
2. CME RS will record the Amendment.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.



Additional Notes
1. The RegRptTyp will be set to 9 = Post Trade Event
2. The Trade Continuation flag will be set to 8 = Amendment
3. α USI is required on continuation event (Post Trade event) reporting.

Responses
3. The SDR will respond back with a TrdRptStat of 105 = SDR Accepted. The SDR will respond back with a Nack (TrdCaptRptAck) and an appropriate RejText if it cannot process the termination report submitted.

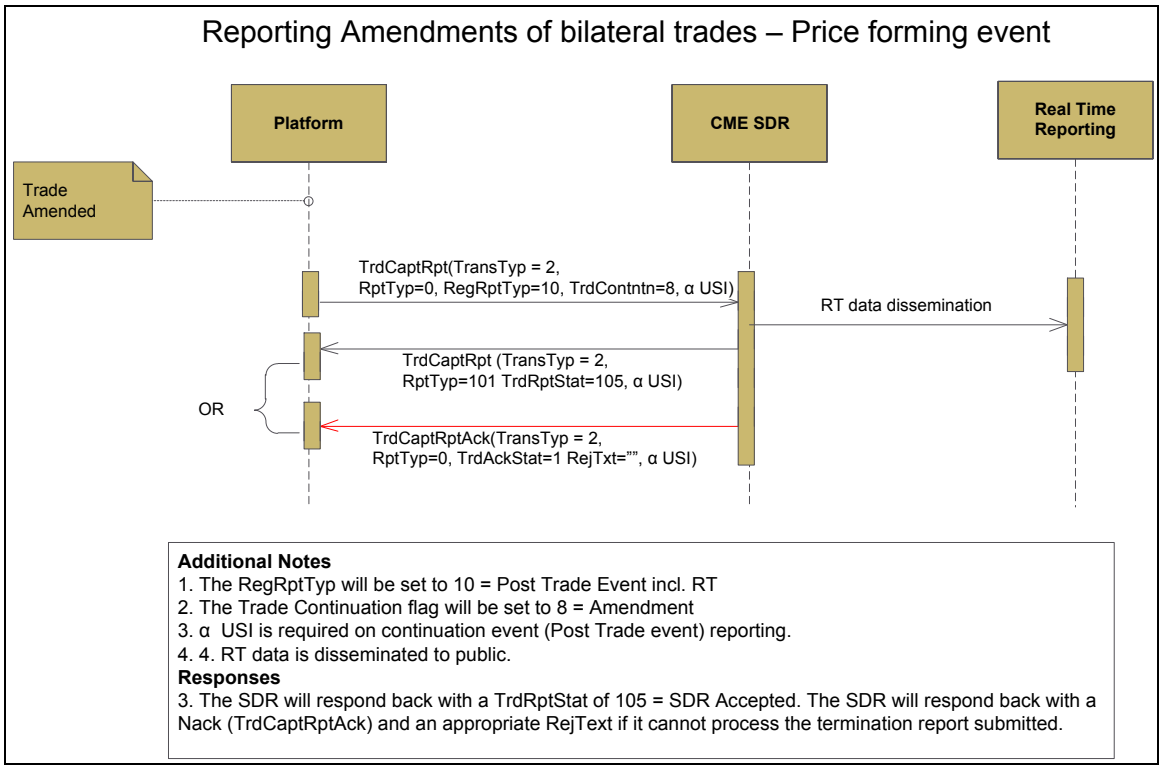
Reporting Amendments that are Price Forming

The steps are

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event including RT** (10). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Amendment** (8). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.
2. CME RS will report RT data to public and record the Amendment.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.

Reporting Amendments that Increase notional

The flow is the same as reporting a Price forming amendment. The Submitters can use a **TrdContntn (**Trade Continuation flag) of **Increase** (9) instead of **Amendment** (8).

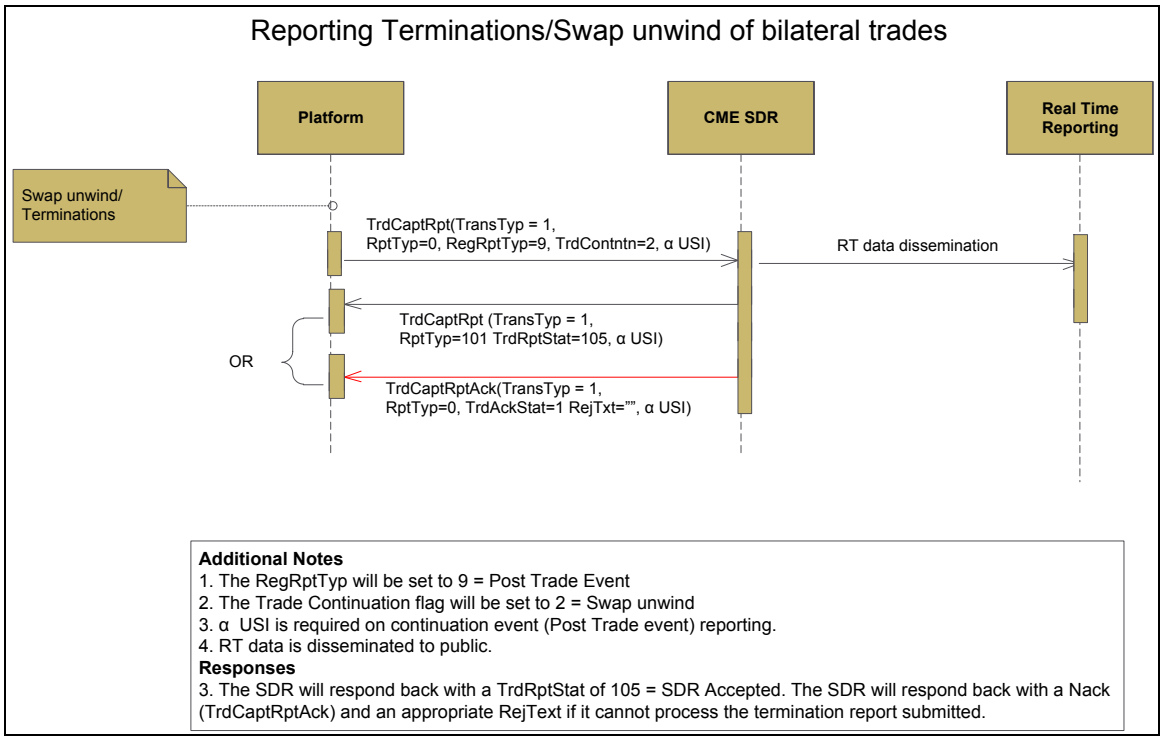


6.2.2 Reporting Swap Unwind/Termination

In this scenario, the participant submits a termination to a previously reported Swap. These are also referred to as Swap Unwinds. Swap terminations will need to be reported to public because these affect prices.

The steps are

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event including RT** (10). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Swap Unwind** (2). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.
2. CME RS will report RT data to public and record the Termination.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Rejected** (1) and an appropriate RejTxt.



6.2.3 Reporting Partial Swap Unwind/Partial Terminates

In this scenario the swap is partially terminated. There is a decrease in notional. The TransTyp will be set to 2 (Replace), the regulatory report type will be set to 10 which is Post Trade event including RT . The Trade Continuation will be set to a 3 which is a partial swap unwind. Please refer to ***Reporting Amendments*** flow for the workflow details.

6.2.4 Reporting Novations to CME RS as Terminates and new trades

Novation is the act of replacing one of the counterparties in an OTC trade with counterparty after consent with all the parties involved in the deal. In this scenario a novation is reported by terminating the old trade with the existing counterparty and reporting a new trade with the new counterparty. The new trade will have a new USI. The terminate will be need to be real time reported. The new trade will need to be real time reported if it affects the price which includes payment of any upfront fees etc.

The steps are

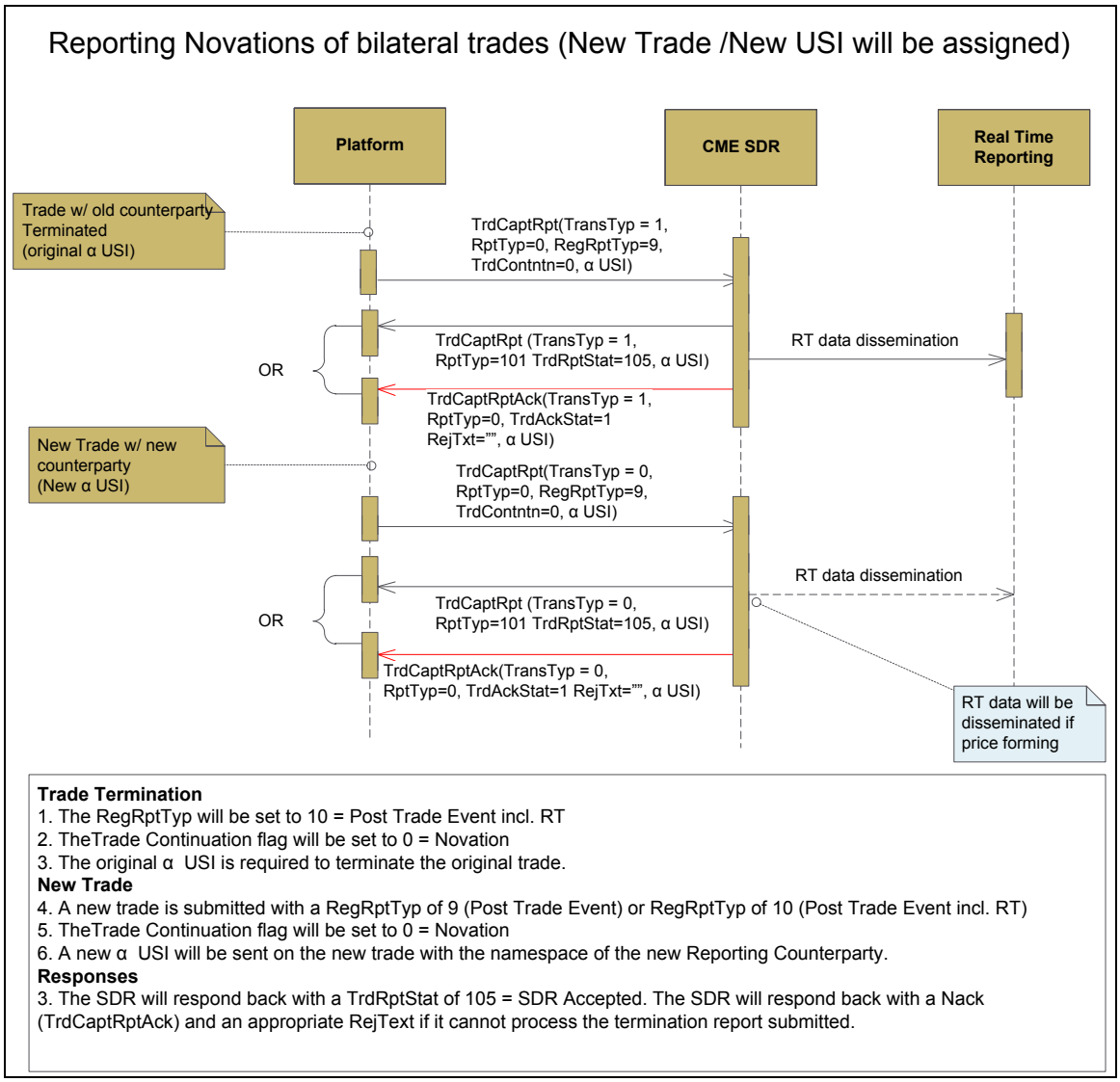
Reporting the Terminate

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event including RT** (10). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Novation** (0). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.
2. CME RS will report RT data to public and record the Termination.

3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.

Reporting the New trade

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event including RT** (10). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Novation** (0). The participant includes a new α USI in the **RegTrdID** block of the message assigned by the Reporting Counterparty. Additionally the original USI will be specified as the prior USI.
   Note: If an α USI has not been assigned to the report, CME RS will assign a USI using the CME RS namespace and echo it back on confirms to the participant.
2. CME RS will report RT data to public.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **New** (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Reject** (1) and an appropriate RejTxt.



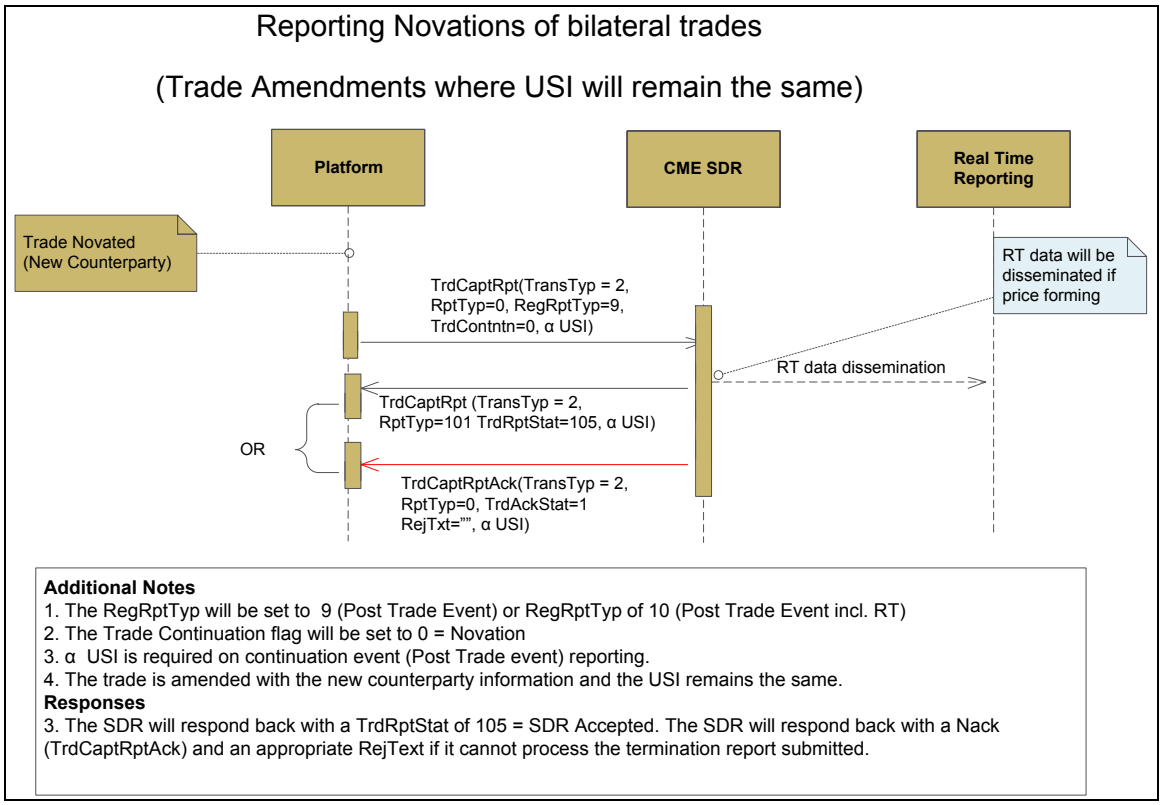
6.2.5 Reporting Novations as Amendments

While reporting a novation to the SDR, the novation can be sent in as an amendment if the USI is going to remain the same. An amendment can be used if the reporting counterparty does not change.

The steps are

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event including RT** (10) or a **RegRptTyp** of **Post Trade Event (**9) . Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Novation** (0). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.

2. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
3. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **Replace** (2), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Rejected** (1) and an appropriate RejTxt.



6.2.6 Reporting Partial Novations

If part of a trade is novated to a different counterparty

1. The trade can be reported as two new trades after terminating the original trade.
2. Or the original trade can be amended with the reduced notional and reported as an amendment; and a new trade is reported with the new counterparty and a new USI.

6.2.7 Reporting Options Exercise

When options (Swaptions) are exercised, the event will have to be reported to the SDR as a continuation event. The Option that was originally reported is terminated and the new created underlying swap is reported to the SDR as part of the continuation event. The new swap trade will have a new USI. The termination of the Option will be needed to be real time reported. The new

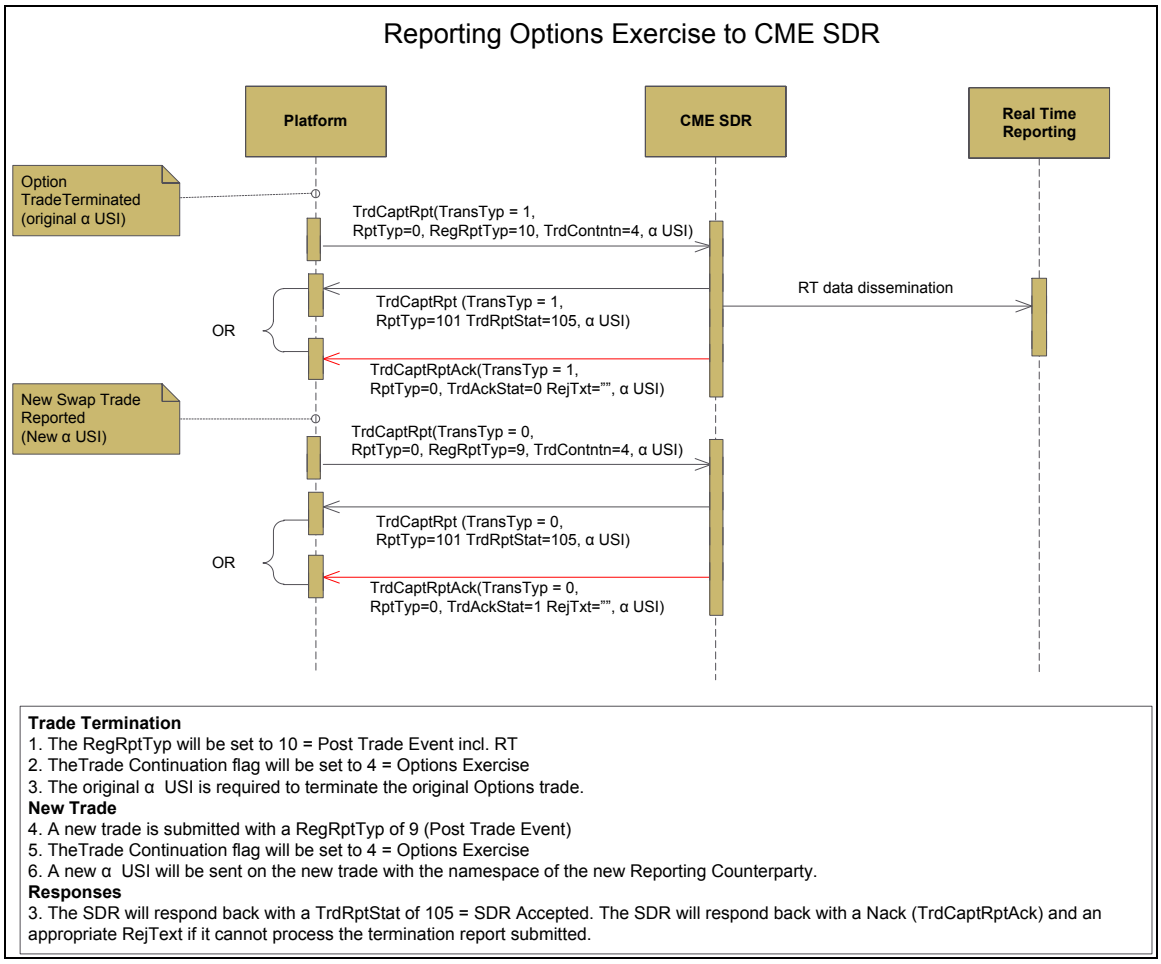
Swap trade does not need to be real time reported.

The steps are
Reporting the Terminate

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event including RT** (10). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Exercise** (4). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.
2. CME RS will report RT data to public and record the Termination.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **Cancel** (1), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Rejected** (1) and an appropriate RejTxt.

Reporting the New trade

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Event** (9). Additionally the **TrdContntn** (Trade Continuation flag) will be set to **Exercise** (4). The participant includes the α USI in the **RegTrdID** block of the message assigned by the Reporting Counterparty.
   Note: if an α USI has not been assigned to the report, CME RS will assign a USI using the CME RS namespace and echo it back on confirms to the participant..
2. CME RS will persist the PET data for the newly created underlying Swap.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **New** (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Rejected** (1) and an appropriate RejTxt.



Trade Termination
1. The RegRptTyp will be set to 10 = Post Trade Event incl. RT
2. TheTrade Continuation flag will be set to 4 = Options Exercise
3. The original α USI is required to terminate the original Options trade.

New Trade
4. A new trade is submitted with a RegRptTyp of 9 (Post Trade Event)
5. TheTrade Continuation flag will be set to 4 = Options Exercise
6. A new α USI will be sent on the new trade with the namespace of the new Reporting Counterparty.

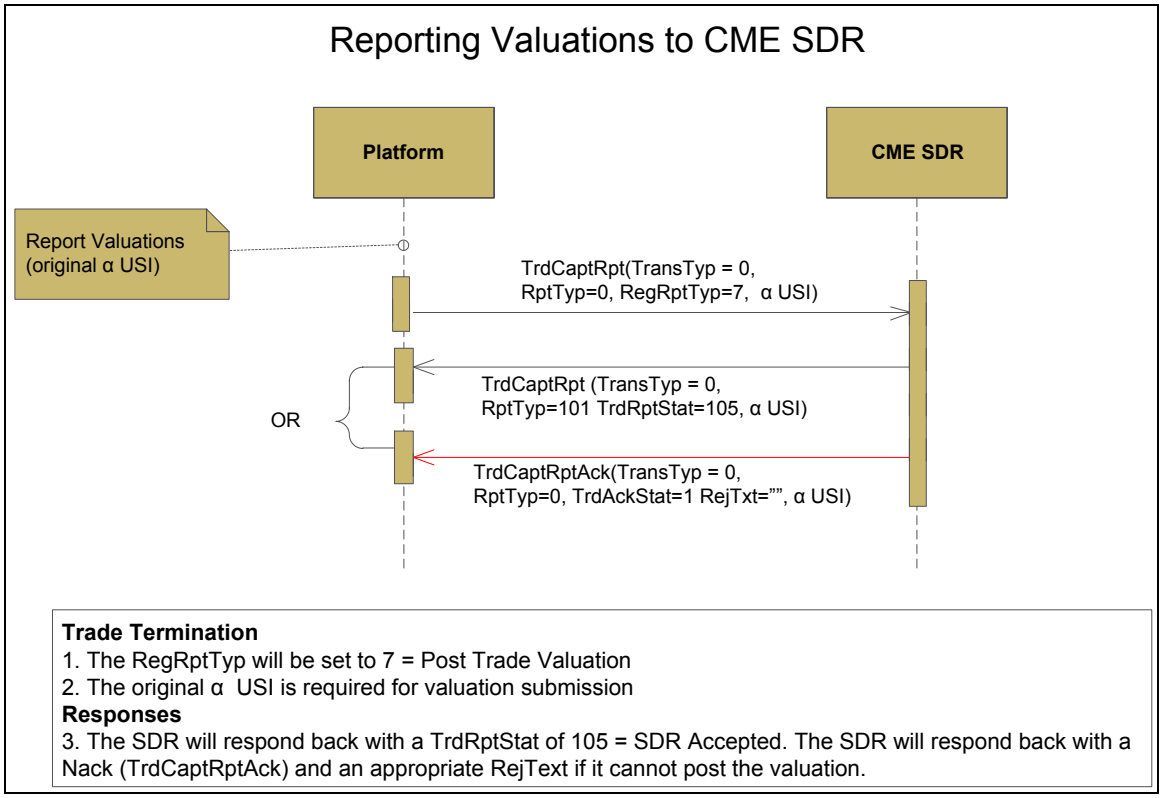
Responses
3. The SDR will respond back with a TrdRptStat of 105 = SDR Accepted. The SDR will respond back with a Nack (TrdCaptRptAck) and an appropriate RejText if it cannot process the termination report submitted.

6.2.8 Reporting Valuations

In this scenario, the participant submits valuations for a previously reported Swap to fulfill the continuation data reporting obligation.

The steps are
Reporting the Terminate

1. The participant sends a **TrdCaptRpt** Message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0) and a **RegRptTyp** of **Post Trade Valuation** (7). The participant includes the α USI in the **RegTrdID** block of the message.
   Note: The trade will be rejected if a USI is not specified or the USI specified is not found.
2. CME RS will persist the valuation data submitted by the participant.
3. If CME RS was able to process the message a confirmation is sent to the participant using a **TrdCaptRpt** message with a **TransTyp** of **New** (0), a **RptTyp** of **Notification** (101) and a **TrdRptStat** of **Accepted by SDR** (105).
4. If CME RS could not process the message, a negative Ack is send to the participant using a **TrdCaptRptAck** message with a **TransTyp** of **New** (0), a **RptTyp** of **Submit** (0), a **TrdAckStat** of **Rejected** (1) and an appropriate RejTxt.



Trade Termination
1. The RegRptTyp will be set to 7 = Post Trade Valuation
2. The original α USI is required for valuation submission

Responses
3. The SDR will respond back with a TrdRptStat of 105 = SDR Accepted. The SDR will respond back with a Nack (TrdCaptRptAck) and an appropriate RejText if it cannot post the valuation.

7 Trade Reporting Specification

7.1 Submitting Entity Information

While submitting trades, identifying the parties or entities involved in the trade is essential to the SDR. If the trades are intended for clearing at the CME DCO, the participants can submit the clearing account. The clearing system can identify the LEI associated with the account if the LEI is registered.

Entity Classifications (“Swap Dealer”,”Major Swap Participant”, “US Person”,”Financial Entity”) belonging to reporting and non-reporting counterparties can be specified by using the appropriate sub types within the party block on the FIXML message. The following sub types are to be used within the party block to denote the entity classifications:

- A Swap Dealer is specified as: **<Sub Typ=”45 ID=”Y”/>**
- A Major Swap Participant is specified as **<Sub Typ=”46 ID=”Y”/>**
- A Financial Entity is specified as **<Sub Typ="47" ID="Y"/>**
- A US Person is specified as **<Sub Typ="48" ID="Y"/>**

Samples of the various types of entity classification specifications are as follows:

- Reporting Counterparty as Swap Dealer:

```
<Pty R="7" ID="LEI00000PARTYA" Src="N">
  <Sub Typ="49" ID="Y" />
  <Sub Typ="45" ID="Y" />
</Pty>
```

- Reporting Counterparty as Major Swap Participant:

```
<Pty R="7" ID="LEI00000PARTYA" Src="N">
  <Sub Typ="49" ID="Y" />
  <Sub Typ="46" ID="Y" />

</Pty>
```

- Reporting Counterparty as Financial Entity:

```
<Pty R="7" ID="LEI00000PARTYA" Src="N">
  <Sub Typ="49" ID="Y" />
  <Sub Typ="47" ID="Y" />
</Pty>
```

- Reporting Counterparty as US Person:

```
<Pty R="7" ID="LEI00000PARTYA" Src="N">
  <Sub Typ="49" ID="Y" />
```

```
        <Sub Typ="48" ID="Y" />
    </Pty>
```

In accordance with the FIXML specification, the same entity classification can be specified for the non reporting counterparty by eliminating the sub type= 49 specification from the above message samples.

Details about retrieving entity information from CME ClearPort are available in the CME ClearPort Entity Reference API.

7.1.1 Submitting Legal Entity Identifier (LEI)

Each counterparty to a swap subject to the jurisdiction of the CFTC must be identified in all recordkeeping and swap data reporting under Part 45 by using a single legal entity identifier, known as LEI.
Until the FSB endorses the recommendations, the CFTC is referring to the identifier to be used in reporting under the CFTC rule as the **CFTC Interim Compliant Identifier (CICI).**

The API will not make the distinction between LEI and CICI.

```
<Pty R="7" ID=" LEI of the Trading Firm" Src="N"/>      N implies LEI
```

7.1.2 Submitting Reporting Counterparty

The Reporting Counterparty (RCP) is the party to a swap with the responsibility to report a publicly reportable swap transaction as soon as technologically practicable to a SDR in accordance with the Dodd-Frank Act. Under this Act, one party must bear responsibility to ensure that the trade is reported.

In their rulemaking, the CFTC has created a hierarchy whereby:

- SDs always report when trading with MSPs and end users, and
- MSPs always report when trading with end users.

The Reporting counterparty can be specified along with the Customer Account if the trade is being submitted to be cleared at CME DCO or with the Trading firm. The Reporting counterparty is identified in the Sub tag.

```
<Pty R="24" ID=" PlatformAliasForAcct " Src="D">      D implies a Custom value
  <Sub ID="BCG" Typ="3">                              BCG is the Platform identifier for the Account
                                                      and Typ="3" implies Platform
  <Sub ID="Y" Typ="49">                               Typ=49 implies Reporting Counterparty.
</Pty>
```

```
<Pty R="7" ID=" LEI of the trading firm " Src="N">
   <Sub ID="Y" Typ="49">
</Pty>
```

N implies an LEI
Typ=49 implies Reporting Counterparty.

7.1.3 Submitting Other Party Roles

Use the following party roles (R) in the Party block when submitting a dual-sided trade. Refer to the validation rules when submitting Party roles.

Field	XPath	Description
LEI of the Trading firm	/TrdCaptRpt/RptSide/Pty/@R=”7” /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/@Src="N"	Legal Entity identifier of the trading firm to identify the side submitting the trade. Supported Value: R - 7 – Trading Firm Src – N – Legal Entity Identifier
Trader ID	/TrdCaptRpt/RptSide/Pty/@R="36" /TrdCaptRpt/RptSide/Pty/@ID	The UserID of the trader individual for a trading entity (typically a trading firm in this model) who is authorized to perform functions like submit trades into CME ClearPort, view trades etc.. Supported Value: 36 – Trader User ID or Asset Manager User ID
Broker Firm	/TrdCaptRpt/RptSide/Pty/@R="30" /TrdCaptRpt/RptSide/Pty/@ID	The Inter dealer Broker/Agent who brokered the deal. Supported Value: 30 – Inter Dealer Broker (IDB)
Reporting Counterparty	/TrdCaptRpt/RptSide/Pty/@R="7" /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/ @Src="N" /TrdCaptRpt/RptSide/Pty/ Sub/@Typ="49" /TrdCaptRpt/RptSide/Pty/ Sub/@ID=”Y”	The Reporting Counterparty (RCP) is the party to a swap with the responsibility to report a publicly reportable swap transaction.
SEF (Swap Execution Facility)	/TrdCaptRpt /Pty/@R="73" /TrdCaptRpt/ Pty/@ID /TrdCaptRpt/ Pty/@Src="N"	The LEI of the Swap Execution facility. This is specified if the VenueTyp is a SEF or a DCM.
SDR (Swaps Data Repository)	/TrdCaptRpt/ Pty/@R="102" /TrdCaptRpt/ Pty/@ID /TrdCaptRpt/ Pty/@Src="N"	The LEI of the Swaps Data Repository to which the bilateral trade was reported.

Field	XPath	Description
Swap Dealer Indicator	/TrdCaptRpt/RptSide/Pty/@R="7" /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/ @Src="N" /TrdCaptRpt/RptSide/Pty/ Sub/@Typ="45" /TrdCaptRpt/RptSide/Pty/ Sub/@ID=”Y”	This indicates of a counterparty specified in is a Swap Dealer with respect to the Swap.
Swap Dealer Indicator	/TrdCaptRpt/RptSide/Pty/@R="7" /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/ @Src="N" /TrdCaptRpt/RptSide/Pty/ Sub/@Typ="45" /TrdCaptRpt/RptSide/Pty/ Sub/@ID=”Y”	This indicates of a counterparty specified in is a Swap Dealer with respect to the Swap.
Major Swap Participant Indicator	/TrdCaptRpt/RptSide/Pty/@R="7" /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/ @Src="N" /TrdCaptRpt/RptSide/Pty/ Sub/@Typ="46" /TrdCaptRpt/RptSide/Pty/ Sub/@ID=”Y”	This indicates of a counterparty specified in is a Major Swap participant with respect to the Swap.
Financial Entity Indicator	/TrdCaptRpt/RptSide/Pty/@R="7" /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/ @Src="N" /TrdCaptRpt/RptSide/Pty/ Sub/@Typ="47" /TrdCaptRpt/RptSide/Pty/ Sub/@ID=”Y”	This indicates if the counterparty is not a swap dealer or a major swap participant with respect to the swap, an indication of whether the counterparty is a financial entity as defined in CEA § 2(h)(7)(C).
US Person Flag	/TrdCaptRpt/RptSide/Pty/@R="7" /TrdCaptRpt/RptSide/Pty/@ID /TrdCaptRpt/RptSide/Pty/ @Src="N" /TrdCaptRpt/RptSide/Pty/ Sub/@Typ="47" /TrdCaptRpt/RptSide/Pty/ Sub/@ID=”Y”	This indicates if the counterparty is a US Person.

7.1.4 Specifying counterparty LEI on Trades

Each counterparty to a swap subject to the jurisdiction of the CFTC must be identified in all recordkeeping and swap data reporting under Part 45 by using a single legal entity identifier, known as LEI.
Until the FSB endorses the recommendations, the CFTC is referring to the identifier to be used in reporting under the CFTC rule as the **CFTC Interim Compliant Identifier (CICI).**

CME RS will not make the distinction between LEI and CICI.

```
<Pty R="7" ID=" LEI of the Trading Firm" Src="N"/>
```

N implies LEI

7.2 Submitting Trade/Swap Identifiers

7.2.1 Universal Swap Identifier (USI)

The USI is a unique identifier assigned to all swap transactions which identifies the transaction (the swap and its counterparties) uniquely throughout its duration. The creation and use of the USI has been mandated by the CFTC and SEC as part of the Dodd-Frank Act. The Part 45 rules under Dodd Frank Act prescribe USI creation using the "namespace" method. Under this method, the first characters of each USI will consist of a unique code that identifies the registered entity creating the USI given to the registered entity by the Commission during the registration process. The remaining characters of the USI will consist of a code created by the registered entity that must be unique with respect to all other USI's created by that registered entity.

7.2.1.1 Terms and definitions

Namespace – A unique code that identifies the registered entity creating the USI
Transaction Identifier – An identifier that uniquely identifies the swap transaction within the registered entity
Registered Entity – denotes an entity that facilitates swaps transactions

7.2.1.2 Structure of the USI

Conventions

The USI standard uses the following conventions for data element representations (based on ISO 8908:1993, 3.2).
Character representations:
n : Digits (numeric characters 0 to 9 only);
a : uppercase letters (alpha character A-Z only without "special" characters such as blanks, separators, punctuation , etc.);
The format of the USI shall be
Namespace : 10!n
Transaction Identifier : 32an

Namespace

The namespace is the first component of the USI. It is a ten-digit alphanumeric identifier that consists of a three-digit prefix followed by a seven-digit identifier unique to each three-character prefix. The range of 101-119 is reserved for CFTC use for the three digit prefix.

CFTC Reserved Namespace

CFTC will initially use 101 or 102 out of this range, followed by the seven-digit identifier assigned by the Commission.

NFA Reserved Namespace

The namespace of NFA-registered entities will use 103 or 104 followed by the seven-digit NFA ID assigned by the NFA.

Available Namespace Range

The range available for the prefix to other entities that could issue USIs in the future is 120-ZZZ.

Namespace Exclusions

The namespace has the following exclusions:
It may not start with the digit zero (0).
It may not start with or use the letter O.
It may not start with or use the letter I.

Transaction Identifier

Appended to the value of each namespace instance will be the unique identifier for the swap transaction as assigned by the entity reporting swap data to the Swap Data Repository (SDR). The appended value must be unique within each namespace value. The appended value can be of variable length upto 32 characters. The namespace together with the appended value make up the USI.

Transaction Identifier Exclusions

The transaction identifier has the following exclusions:

- All special characters other than "-", "|", ".", "_" (underscore) , ":" , and " "(a space) are excluded.

7.2.2 Other Trade Identifiers

The API allows submission of other identifiers in addition to the USI.

Field	XPath	Description
Submitter Execution ID (Secondary Execution ID)	/TrdCaptRpt/@ExecID2	Identifier assigned by the submitter to identify the execution. This can be used to link spread trades submitted as outrights to the SDR.
Client Order ID	/TrdCaptRpt/RptSide/@ClOrdID	The Submitter provides a unique ID associated with the trade that is referred to as the Client Order ID.

7.2.3 Specifying USI on outright trades

When a trade is reported for the SDR, a bilateral USI for the Swap is required. This is the initial USI that is assigned to the swap upon execution by the Reporting counterparty or the SEF. *If the trade is submitted without a USI,* ***CME RS will assign a USI for the Swap using the CME RS namespace***. If the trade is submitted for clearing to CME DCO without a bilateral USI, the ***CME DCO will assign a USI for the swap using the CME DCO namespace***. The USI will be communicated back to the submitter on subsequent acknowledgements and notifications by the CME DCO or CME RS.

Sample of a bilateral USI assigned by a Reporting counterparty.

```
<RegTrdID ID="777111" Typ="0" Src="RCP_Namespace"    Typ=0 – Current USI
Evnt="0"/>                                           Evnt=0 – Trade Execution
```

Sample of a bilateral USI assigned by CME DCO

```
<RegTrdID ID="777111" Typ="0" Src="1010000023"       Typ=0 – Current USI
Evnt="0"/>                                           Src=1010000023 (CME DCO
                                                     Namespace value)
                                                     Evnt=0 – Trade Execution
```

7.2.4 Specifying USI on Multi leg trades to CME RS

Multi leg trades can be reported as

- **Multiple outright trades** using a link id that would link the multiple outrights. These trades will be submitted like any other outright trades with a USI.
  1. MLegRptTyp will be set to a value of “2” indicating that this is the leg of a multi leg trade.
  2. The ExecID2 can be used to link the trades together in the SDR.
  3. The Trade Price (LastPx) will reflect the Leg Price.
  4. The USI will be a set to a Typ=”0” indicating that it is a bilateral USI.

Leg 1 of a Multi legged trade from Platform to CME RS

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt RptID="0000001" ExecID2="123456" TransTyp="0" RptTyp="0" TrdTyp="22"
TxnTm="2009-10-27T08:15:23.123-05:00" MLegRptTyp="2" LastPx="98.75" LastQty="100"
RegRptTyp="1" >
    <Hdr SID="PLTFM" SSub="user789" TID="CME" TSub="CMESDR"/>
    <RegTrdID ID="123" Typ="0" Src="rcp_namespace" Evnt="0"/>
    <Instrmt ID="CL" Src="H" MMY="200906" Side="1" SecTyp="FUT" Exch="NYMEX"/>
    <TrdRegTS TS="2009-10-27T08:15:22.000-05:00" Typ="1"/>
    <RptSide ClOrdID="514666" InptSrc="PLTFM" Side="1">
        <Pty ID="ABC" R="7" Src="N"/>
    </RptSide>
    <RptSide ClOrdID="8T5678" InptSrc="PLTFM" Side="2">
        <Pty ID="ABC" R="7" Src="N"/>
    </RptSide>
</TrdCaptRpt>
```

Leg 2 of a Multi legged trade from Platform to CME RS

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt RptID="0000002" ExecID2="123456" TransTyp="0" RptTyp="0" TrdTyp="22"
TxnTm="2009-10-27T08:15:23.123-05:00" MLegRptTyp="2" LastPx="98.25" LastQty="200"
RegRptTyp="1" >
    <Hdr SID="PLTFM" SSub="user789" TID="CME" TSub="CMESDR"/>
    <RegTrdID ID="456" Typ="0" Src="rcp_namespace" Evnt="0"/>
    <Instrmt ID="CL" Src="H" MMY="200909" Side="1" SecTyp="FUT" Exch="NYMEX"/>
    <TrdRegTS TS="2009-10-27T08:15:22.000-05:00" Typ="1"/>
    <RptSide ClOrdID="514666" InptSrc="PLTFM" Side="1">
        <Pty ID="ABC" R="7" Src="N"/>
    </RptSide>
    <RptSide ClOrdID="8T5678" InptSrc="PLTFM" Side="2">
        <Pty ID="ABC" R="7" Src="N"/>
    </RptSide>
</TrdCaptRpt>
```

7.2.5 Specifying USI on Multi leg commodity trades submitted for Clearing to CME DCO

The ClearPort API also allows submission of a multileg trade as a single trade. All the legs and the corresponding USIs will be specified within the single trade. For more details refer to ClearPort Trade Submission API document.

- **Single Multi leg trade** using a link id that would link the multiple outrights. These trades will be submitted like any other outright trades with a USI.
  1. MLegRptTyp will be set to a value of “3” indicating that this is the a multi leg trade submission.
  2. The USI will be a set to a Typ=”0” indicating that it is a bilateral USI. A LegRefID will need to be additionally specified

Spread submission message from Platform to ClearPort

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt RptID="0000001" ExecID2="123456" TransTyp="0" RptTyp="0" TrdTyp="22"
TxnTm="2009-10-27T08:15:23.123-05:00" LastQty="20" RegRptTyp="4"  MLegRptTyp="3">
    <Hdr SID="PLTFM" SSub="user789" TID="CME" TSub="CPAPI"/>
    <RegTrdID ID="123" Typ="0" Src="rcp_namespace" Evnt="0" LegRefID="1"/>
    <RegTrdID ID="456" Typ="0" Src="rcp_namespace" Evnt="0" LegRefID="2"/>
    <Instrmt SecTyp="MLEG" SubTyp="BF" Exch="NYMEX"/>
    <TrdLeg QtyTyp="1" LastQty="100" LastPx="98.25" LegNo="1">
        <Leg ID="CL" Src="H" MMY="200906" Side="1" SecTyp="FUT" Exch="NYMEX"/>
    </TrdLeg>
    <TrdLeg QtyTyp="1" LastQty="200" LastPx="98.50" LegNo="2">
        <Leg ID="CL" Src="H" MMY="200909" Side="2" SecTyp="FUT" Exch="NYMEX" />
```

```
    </TrdLeg>
    <TrdRegTS TS="2009-10-27T08:15:22.000-05:00" Typ="1"/>
    <RptSide ClOrdID="514666" InptSrc="PLTFM" Side="1">
        <Pty ID="ACCT-B" R="24"/>
    </RptSide>
    <RptSide ClOrdID="8T5678" InptSrc="PLTFM" Side="2">
        <Pty ID="ACCT-S" R="24"/>
    </RptSide>
</TrdCaptRpt>
```

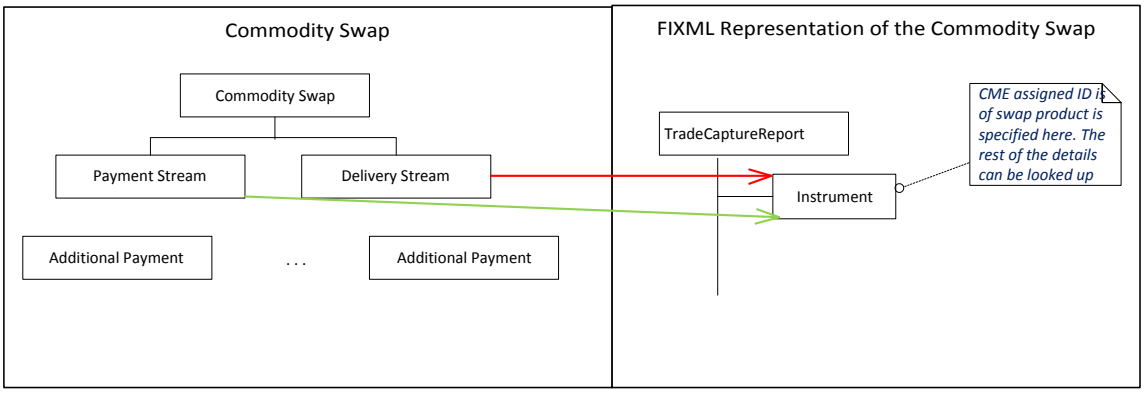
7.3 Submitting Product details for CME listed Products

While reporting instruments that are listed at CME to the CME Repository, it is sufficient to specify the identifying attributes of the Instrument and its underlying. The details are listed below.

While submitting trades that are intended to be cleared at CME DCO or bilateral trades based on CME listed products, identifying the Instrument being traded is critical. CME DCO allows submission of outrights and spreads. The submitted trade must contain all the attributes needed to identify a contract.

Details on getting Product reference information from CME ClearPort are available in the http://www.cmegroup.com/clearing/files/Clearport_Reference_Data_API_FIXML_Message_Specification_and_Samples.pdf.

7.3.1 Commodity Swap Structure



7.3.1.1 Commodity Swap Instrument Block Samples

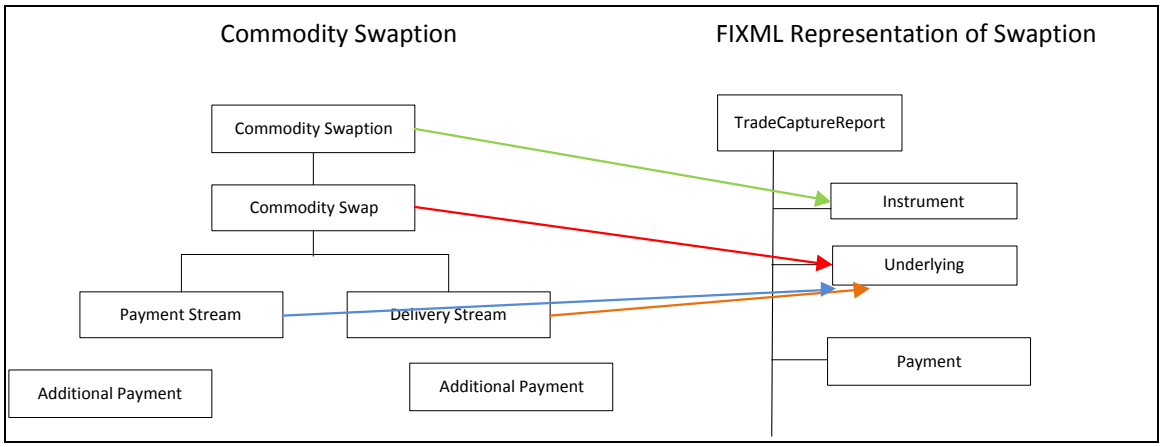
Sample Instrument block for a CME listed Swaps contract.

<Instrmt SecTyp="FUT"	Security Type = FUT – Future
ID="NG"	Security ID -

Src="H"	Security ID assigned by – H – Clearing House
Exch="NYMEX"	Exchange where the security is listed
MMY="201302"/>	Contract Period Code

7.3.2 Commodity Swaption Structure

Sample Instrument block for a CME listed options contract.



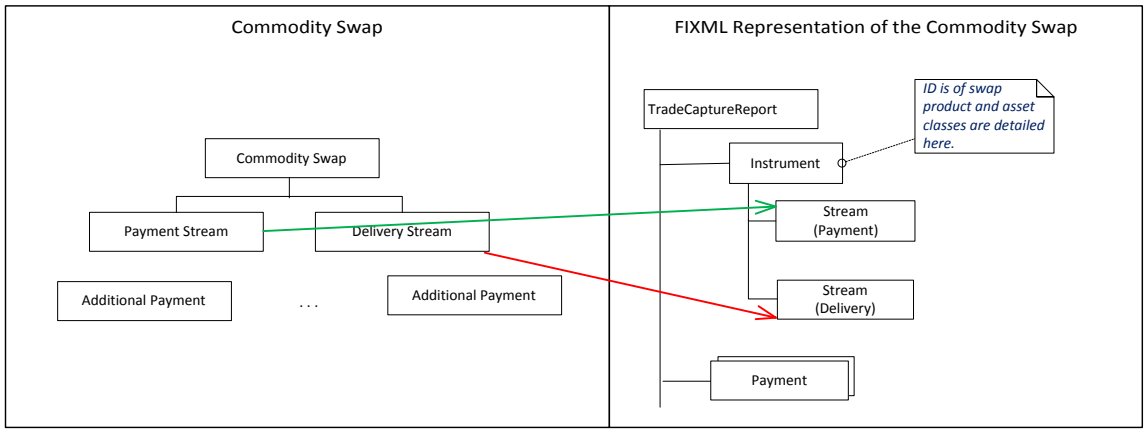
7.3.2.1 Commodity Swaption Instrument Block Samples

Sample Instrument block for a CME listed Swaps contract.

<Instrmt SecTyp="OPT"	Security Type = OPT – Options on a Future
ID="LO"	Security ID -
Src="H"	Security ID assigned by – H – Clearing House
Exch="NYMEX"	Exchnage where the security is listed
MMY="201306"	Contract Period Code
StrkPx="50.00"	Strike Price
PutCall="1"/>	Put or Call Ind 1 = Call
< Undly SecTyp="FUT"	Underlying Security type - Future
ID="CL"	Underlying Security ID
Src="H"	Security ID assigned by – H – Clearing House
Exch="NYMEX"	Exchnage where the security is listed
MMY="201306"/>	Contract Period Code

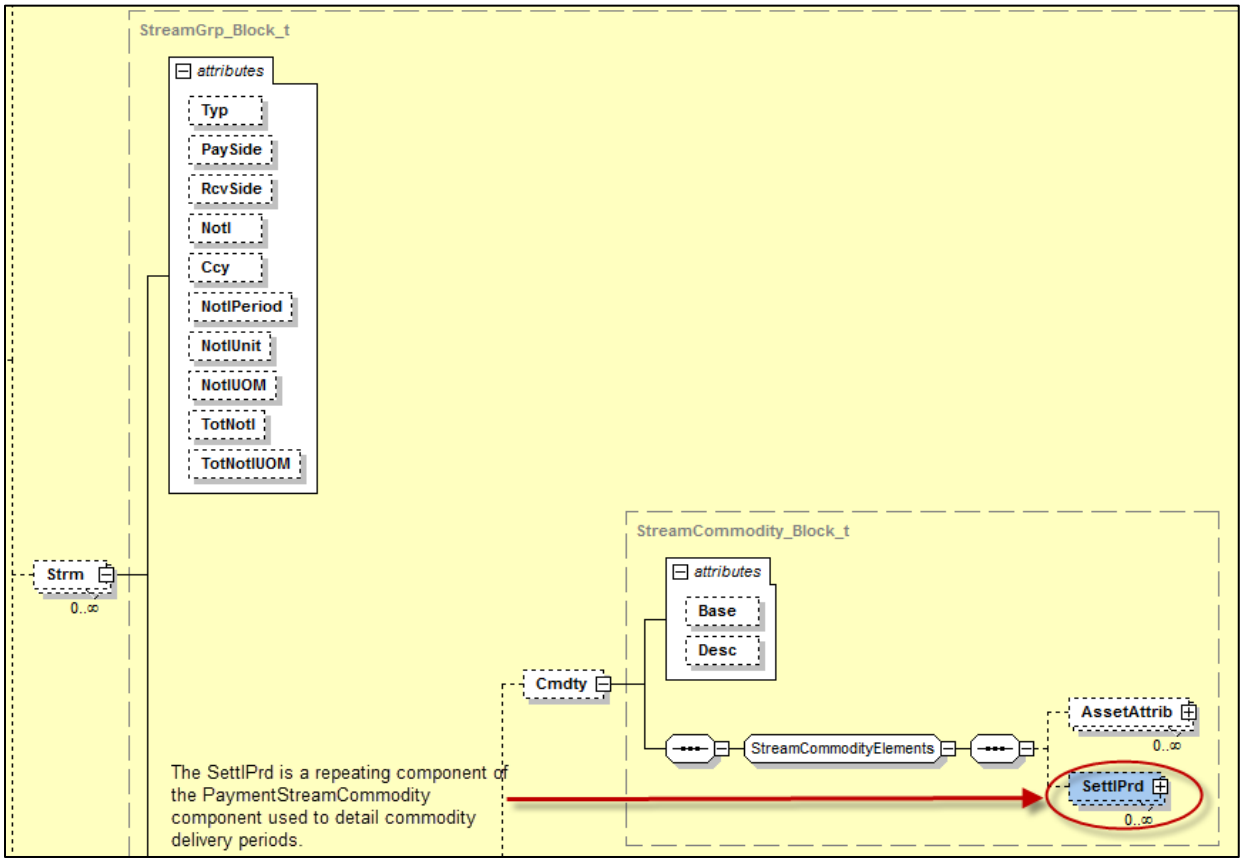
7.4 Submitting Products details for non-CME listed Commodity Swaps

7.4.1 Commodity Swap Structure



The Commodity is specified as part of a Stream. The Stream component describes details like the notional, Unit of measure, currency, the payer, the receiver etc. The Commodity Base specifies the general base type of the commodity traded like Metal, Bullion, Oil, Natural Gas. Coal, Electricity, Inter-Energy, Grains, Oils Seeds, Dairy, Livestock, Forestry, Softs, Weather, Emissions etc. The Description further describes the traded instrument.

The SettlementPeriodGrp is a repeating subcomponent of the PaymentStreamCommodiry component used to detail commodity delivery periods.



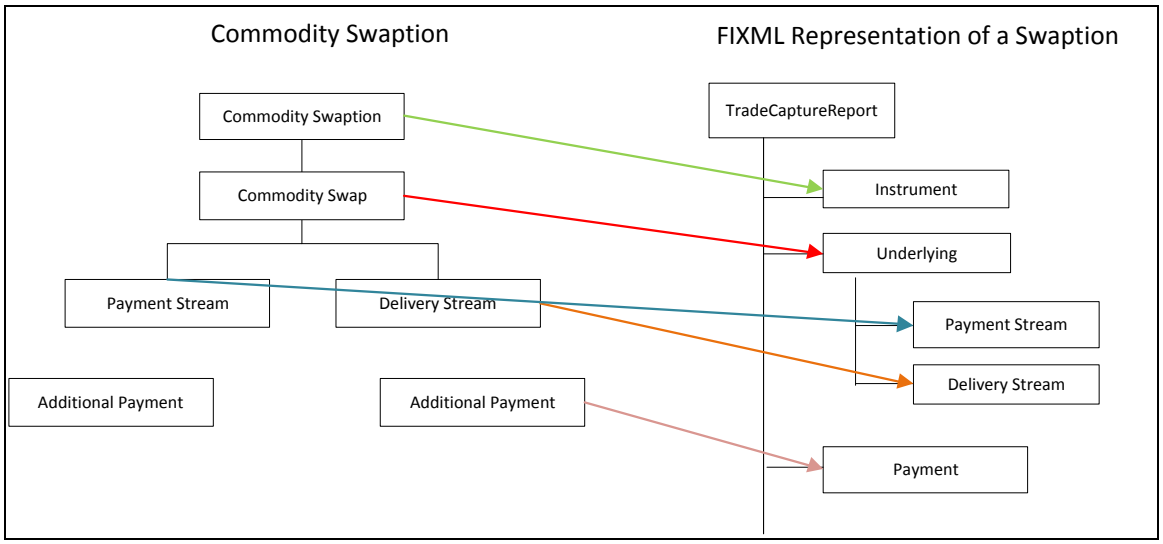
Sample Delivery Stream of an Electricity Swap.

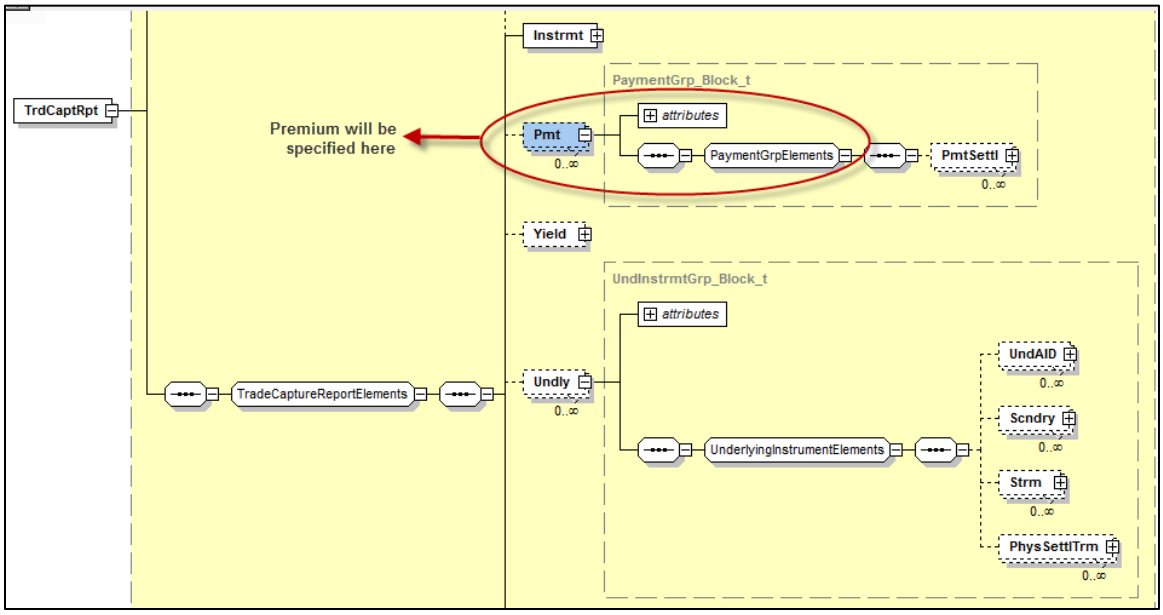
<Instrmt SecTyp="CMDTYSWAP">	
<Strm Typ="1"	Typ="1" means Physical Leg
PaySide="2"	PaySide is 2 = Sell
RcvSide="1"	Receive Side is 1 = Buy
NotIUOM="MWh"	Unit of Measure of the Delivery Stream Quantity
NotIPeriod="1"	Time Unit multiplier for the notional Frequency
NotI="50.00"	Notional Quantity associated with the delivery stream. (50 MWh/hr)
NotIUnit="H"	The Unit associated with the notional Period. H = Hour
TotNotI="204000.00"	Total Notional or the Delivery quantity over the term of the contract.
TotNotIUOM="MWh">	Unit of Measure of the Delivery Stream total Quantity
<Cmdty Base="Electricity"	
Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT), Excluding NERC Holidays">	
<SettlPrd TZ="EPT"	Commodity Delivery TImezone

FlowTyp="1"	1 = On-Peak
Holidays="0">	Holidays="0" means Do Not Include Holidays
<Day Day="8"	8 = All WeekDays
TotHrs="16">	No of Hrs in a Day – 16 Hrs
<Time Start="8" End="23"/>	Delivery Start Hour (1 – 24 indicates midnight to midnight) 7 am Delivery End Hr - 11 pm
</Day>	
</SettlPrd>	
</Cmdty>	
<EfctvDt Dt="2013-01-01"/>	Swap Effective Date
<TrmtnDt Dt="2013-12-31"/>	Swap Termination Date
<DlvryStrm DlvryPnt="Pennsylvania, New Jersey & Maryland - Western Hub"	Delivery Point or Delivery Location
DlvryTyp="1"/>	Specifies under what conditions the buyer and seller should be excused of their delivery obligations. DlvryTyp = 1 Firm (Never excused of delivery obligations)
</Strm>	
</Instrmt>	

7.4.2 Commodity Swaption Structure

For Options on Swaps, the option details are specified in the Instrument block. The Swap is defined in the Underlying Instrument. The Premium is specified in a Payment component.





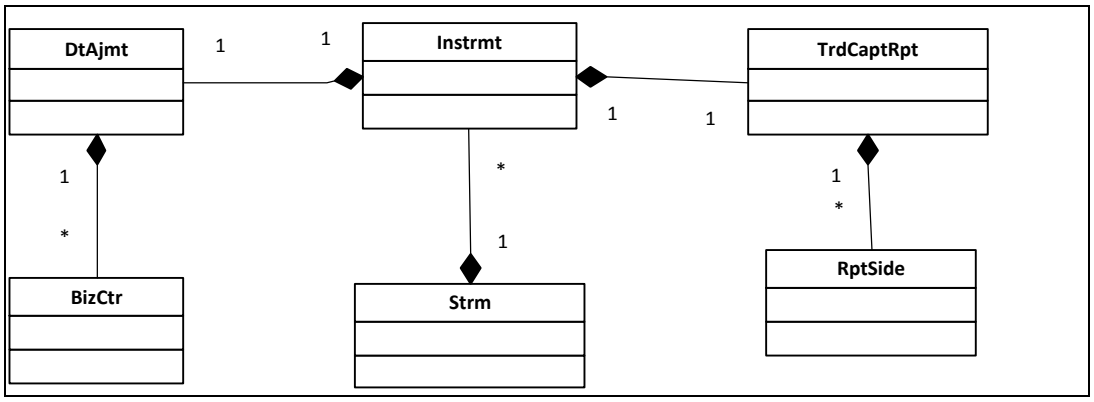
Sample Instrument Block for a Swaption and the associated Underlying Swap

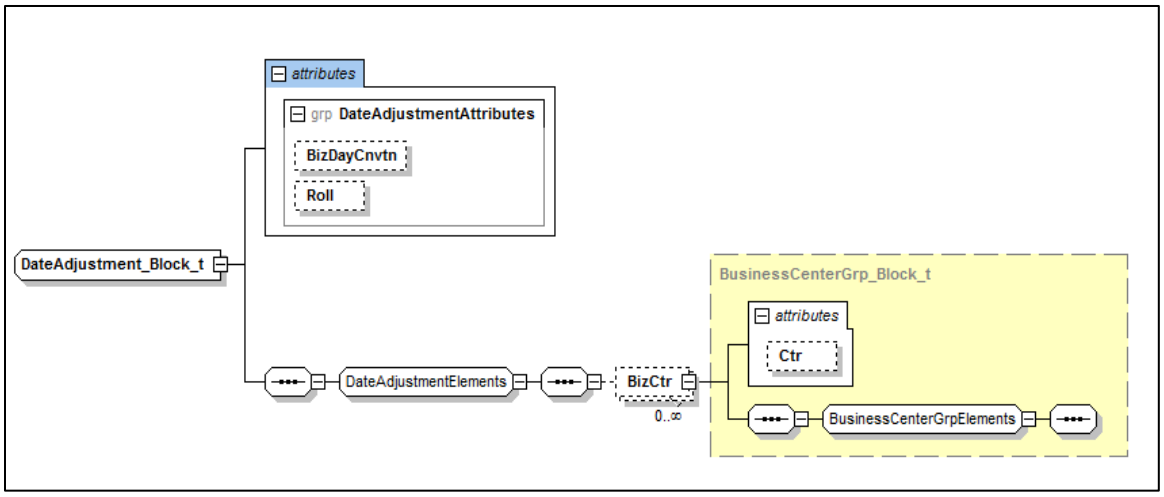
<Instrmt SecTyp=" SWAPTION "	Securoty Type = Swaption (Option on a swap)
StrkPx="55.00"	Strike Price
StrkCcy="USD"	Strike Price Currency
StrkUOM="MWh"	Unit of Measure of the Strike
PutCall="1"	Put or Call 1 = Call Option
ExerStyle="1">	Exercise Stype – 1 = American Style
<OptExr> <Dts FreqPeriod="1" FreqUnit="D"/> </OptExr>	Options Expiration Date Details
<Dts FreqPeriod="1" FreqUnit="D"/>	
</Instrmt>	
<Pmt Typ="10" PaySide="1" RcvSide="2" Px="0.35" PxTyp="2" Ccy="USD"/>	Premium Block Typ = 10 – Options Premium 1 = Buyer is paying the Premium 2 = Seller is receiving the Premium Price Type = 2 - Price is expressed / Contract Premium Currency
<Undly SecTyp="CMDTYSWAP">	Underlying – Commodity Swap
<Strm Typ="0" PaySide="2" RcvSide="1" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1" NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">	1st Leg of the Swap Stream Type 0 = Payment/Cash Settlement 2 = Sell Side is Paying 1 = BuySide is receiving

<Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT), Excluding NERC Holidays">	Underlying Commodity for the Stream
<SettlPrd TZ="EPT" FlowTyp="1" Holidays="0"> <Day Day="8" TotHrs="16"> <Time Start="8" End="23"/> </Day> </SettlPrd>	
</Cmdty>	
<EfctvDt Dt="2012-09-12"/> <TrmtnDt Dt="2012-09-30"/>	
<PmtStrm Typ="0"> <Float Ndx="PJM's Daily Real-Time LMP" NdxLctn="Pennsylvania, New Jersey & Maryland - Western Hub"/> </PmtStrm>	Payment Stream - Floating Stream Floating Rate Index - The Index will be used for determining the payment associated with the Leg.
<Strm Typ="0" PaySide="1" RcvSide="2" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1" NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">	2st Leg of the Swap
<Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT), Excluding NERC Holidays">	
<SettlPrd TZ="EPT" FlowTyp="1" Holidays="0"> <Day Day="8" TotHrs="16"> <Time Start="8" End="23"/> </Day> </SettlPrd>	
</Cmdty>	
<EfctvDt Dt="2012-09-12"/> <TrmtnDt Dt="2012-09-30"/>	
<PmtStrm Typ="0"> <Fixed Rt="55.00" Ccy="USD"/> </PmtStrm>	Paymet Stream – Fixed Stream
</Strm>	
</Undly>	

7.4.3 Specifying Business Centers used for calculation

The parameters needed for Adjusting dates like the business day convention, roll convention and the business centers can be specified as a component of the instrument block. All these parameters can be overridden at the leg (stream) level.



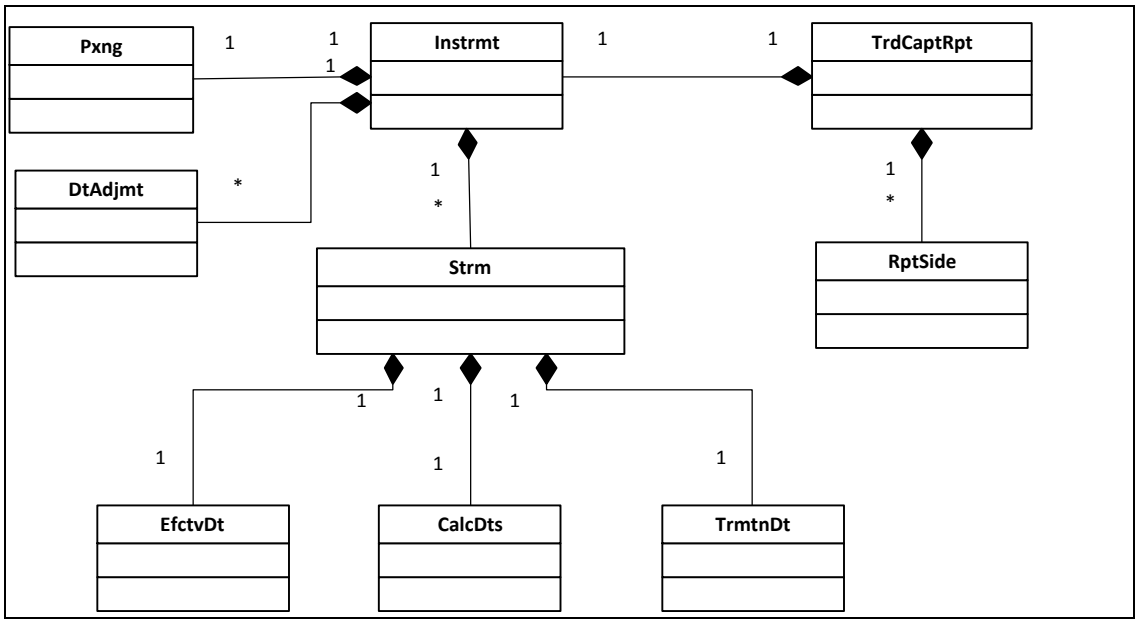


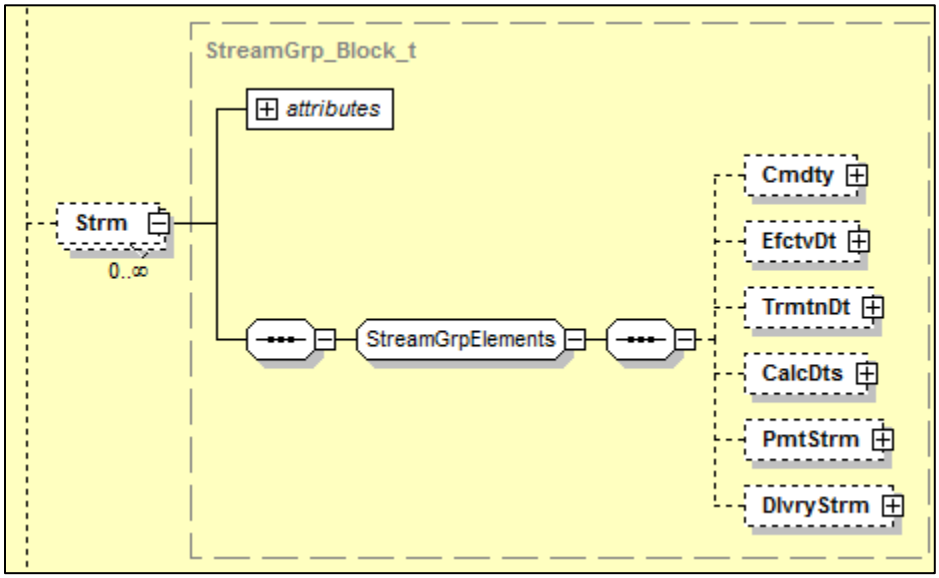
7.4.4 Swap Effective, Termination and Calculation Dates for a commodity Swap

The **StreamEffectiveDate (EfctvDt)** and **StreamTerminationDate (TrmtnDt)** components are required to specify the swap effective and termination date and will need to be specified for each leg (stream). Typically they will be the same for all the legs (streams) in the swap.

StreamCalculationPeriodDates (CalcDts) is a subcomponent of the StreamGrp component used to specify the calculation period dates of the stream. If unadjusted dates are specified for any of the dates like swap effective date or swap termination date or a calculation date, adjustment parameters like business day convention can be specified to calculate the adjusted date in this component.

The **PricingDateTime (Pxng)** component is a subcomponent of Instrument used to specify an adjusted or unadjusted pricing or fixing date and optionally the time for a commodity or FX forward trade.





Sample FIXML for specifying the effective and Termination dates.

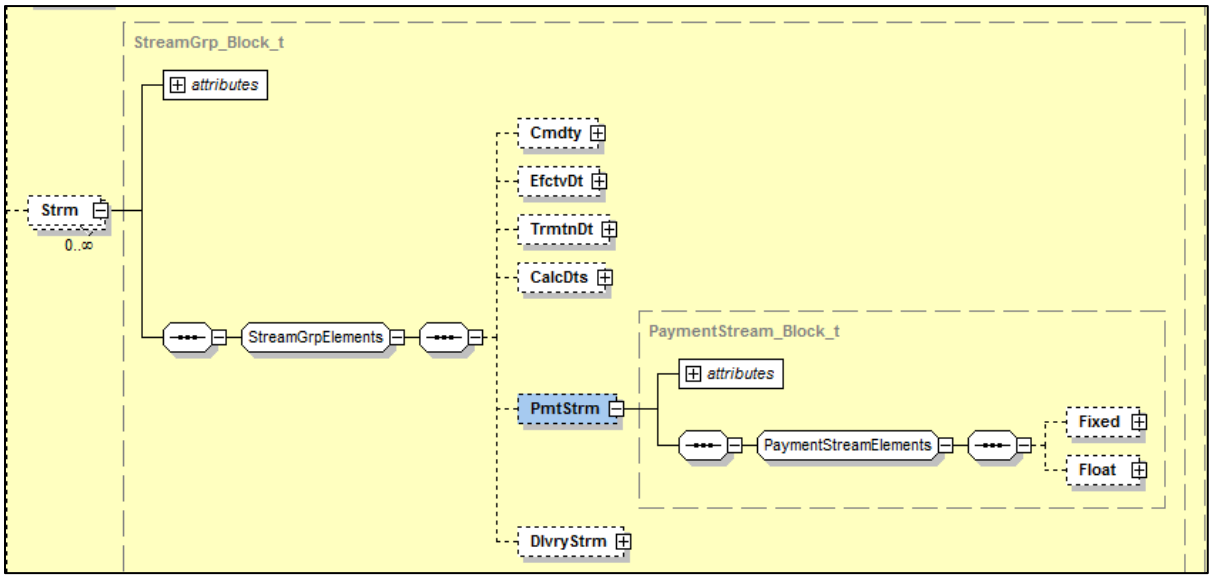
```
<Strm>
        <Cmdty Base="Natural Gas"/>
        <EfctvDt Dt="2013-01-01"/>
        <TrmtnDt Dt="2013-01-31"/>
</Strm>
```

Sample FIXML for specifying the DateAdjustment , Business Day convention and Pricing Date for the Forward

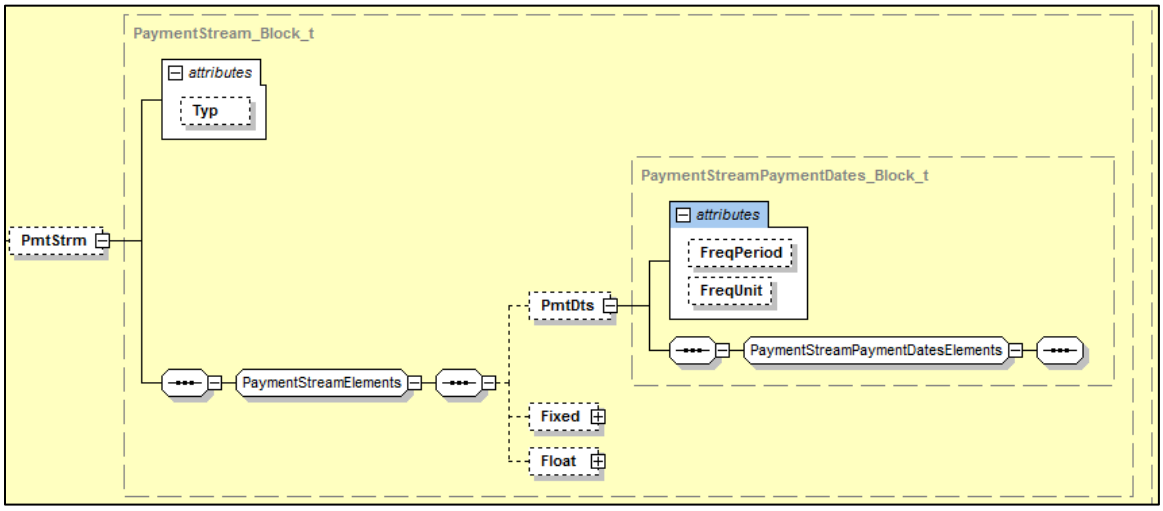
```
<Instrmt SecTyp="FWD" AssetClss="5" AssetSubClss="14" SettlMeth="P">
  <!-- BizDayCnvtn - 7 => Nearest -->
  <DtAdjmt BizDayCnvtn="7">
    <BizCtr Ctr="USNY"/>
    <BizCtr Ctr="LONDON-GOLD"/>
  </DtAdjmt>
  <Pxng Dt="2012-05-04" DtUnadj="2012-05-04"/>
</Instrmt>
```

7.4.5 Legs of a Commodity Swap

A Commodity Swap is comprised of two legs. For Cash Settled swap the legs can be a fixed and/or a float leg. Typically a fixed leg involves a fixed payment associated with it at the end of the swap period. The float leg is calculated based on a floating rate index which is defined in the float leg of the swap. Swaps that are reportable to the SDR are

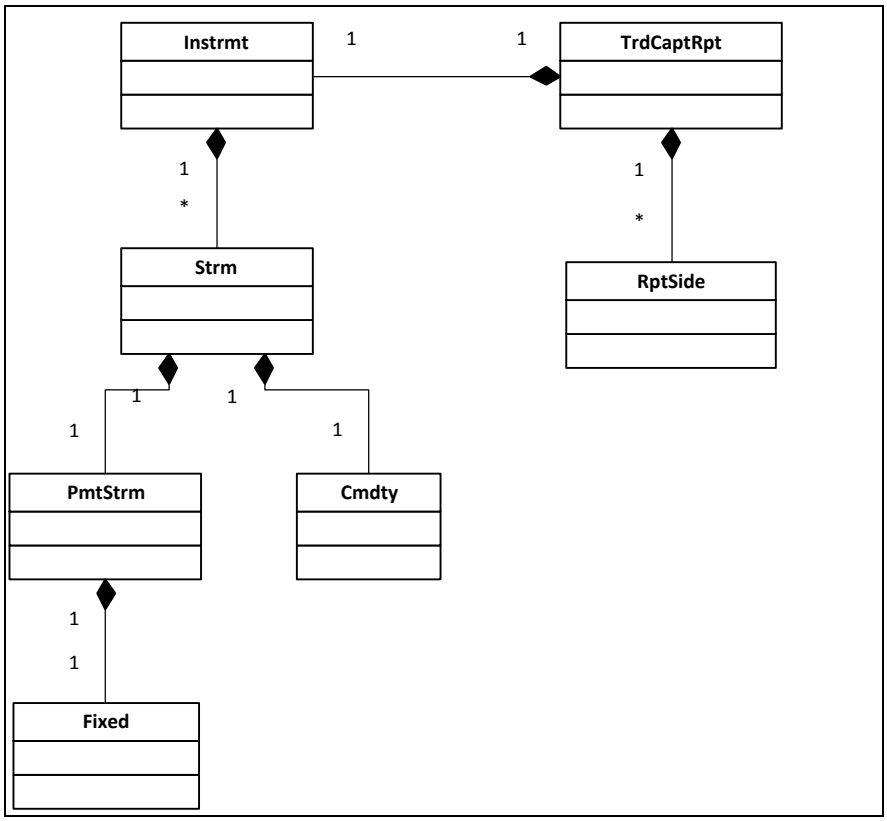


This is the parent component that contains the fixed or the float leg defining the swap.



7.4.6 Fixed leg of a Commodity Swap

This section describes the fixed rate details that can be specified on the fixed leg of a commodity swap. The **PaymentStreamFixedRate (Fixed)** is a subcomponent of the PaymentStream component.

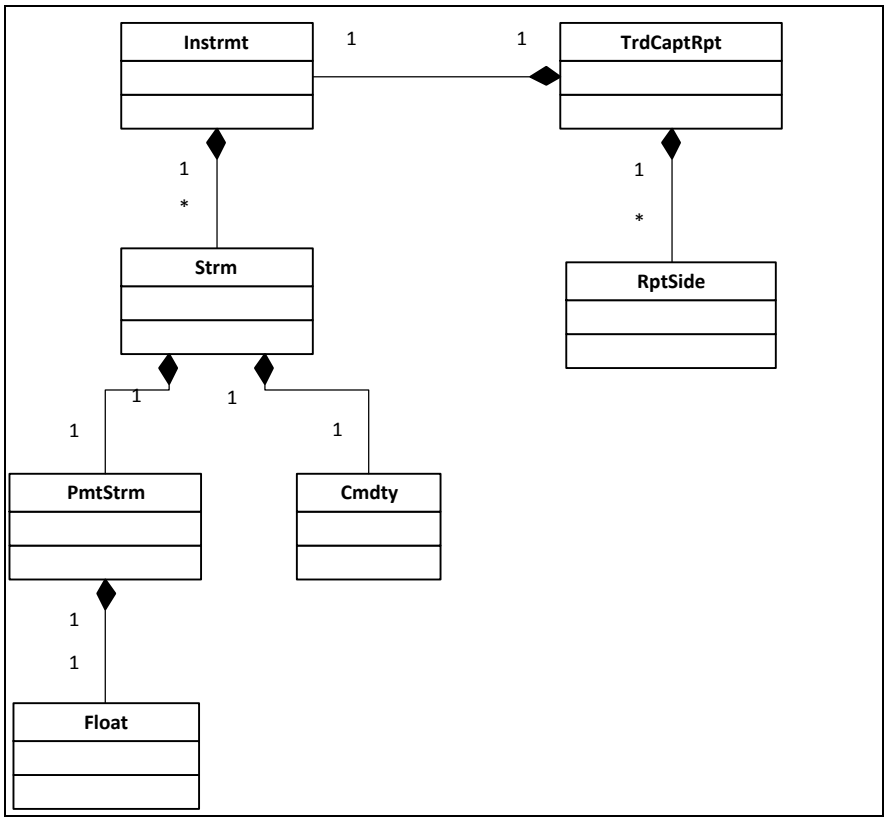


Sample FIXML for specifying the Fixed leg of a commodity Swap.

```
<!-- Note: Typ=0 is a periodic payment -->
        <PmtStrm Typ="0">
                <Fixed Rt="2.79" Ccy="USD"/>
        </PmtStrm>
```

7.4.7 Float leg of a Commodity swap

This section describes the floating rate details that can be specified on the float leg of a commodity swap. The **PaymentStreamFloatingRate (Float)** is a subcomponent of the PaymentStream component.

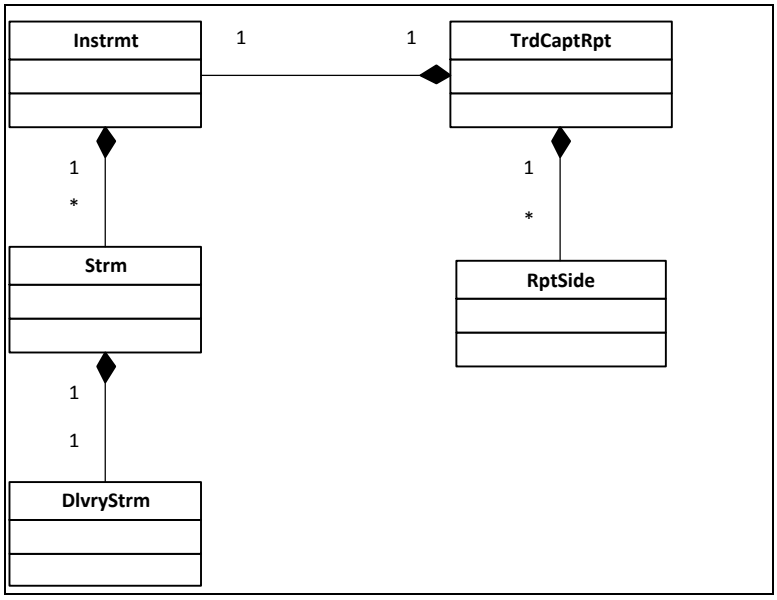


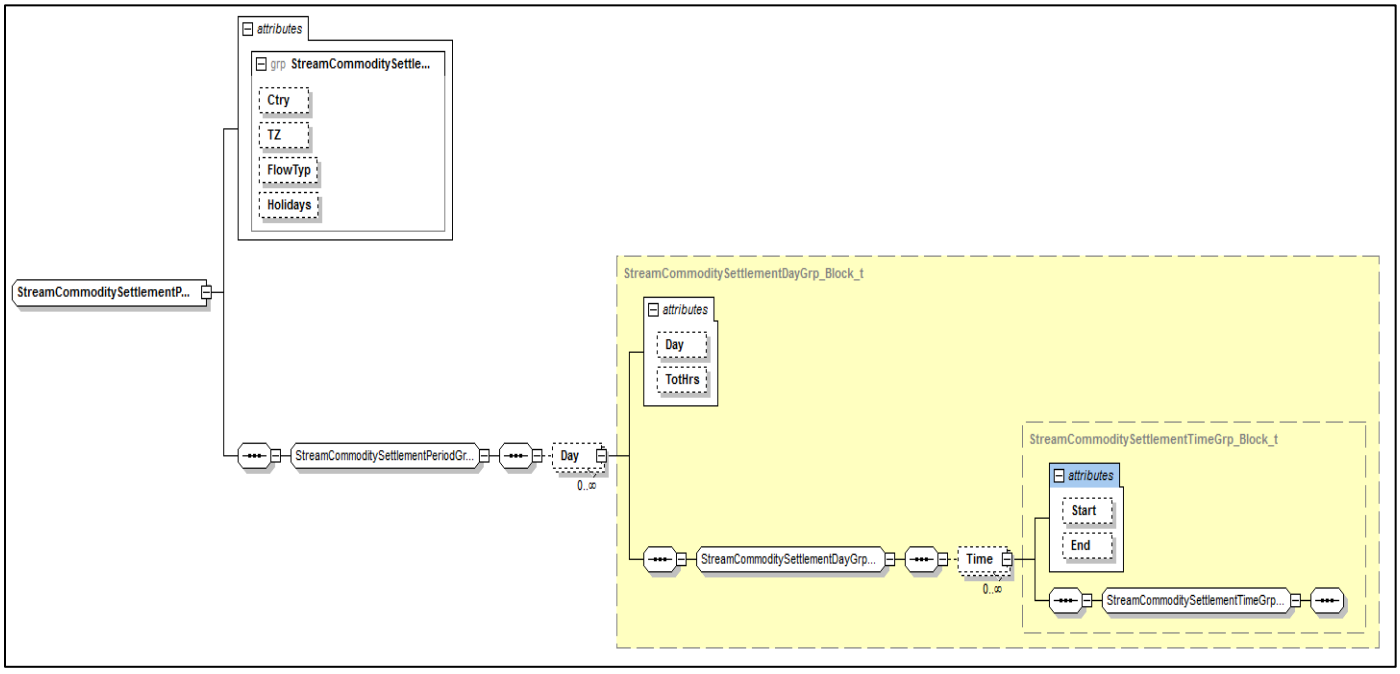
Sample FIXML for specifying a single payment based on a floating rate index.

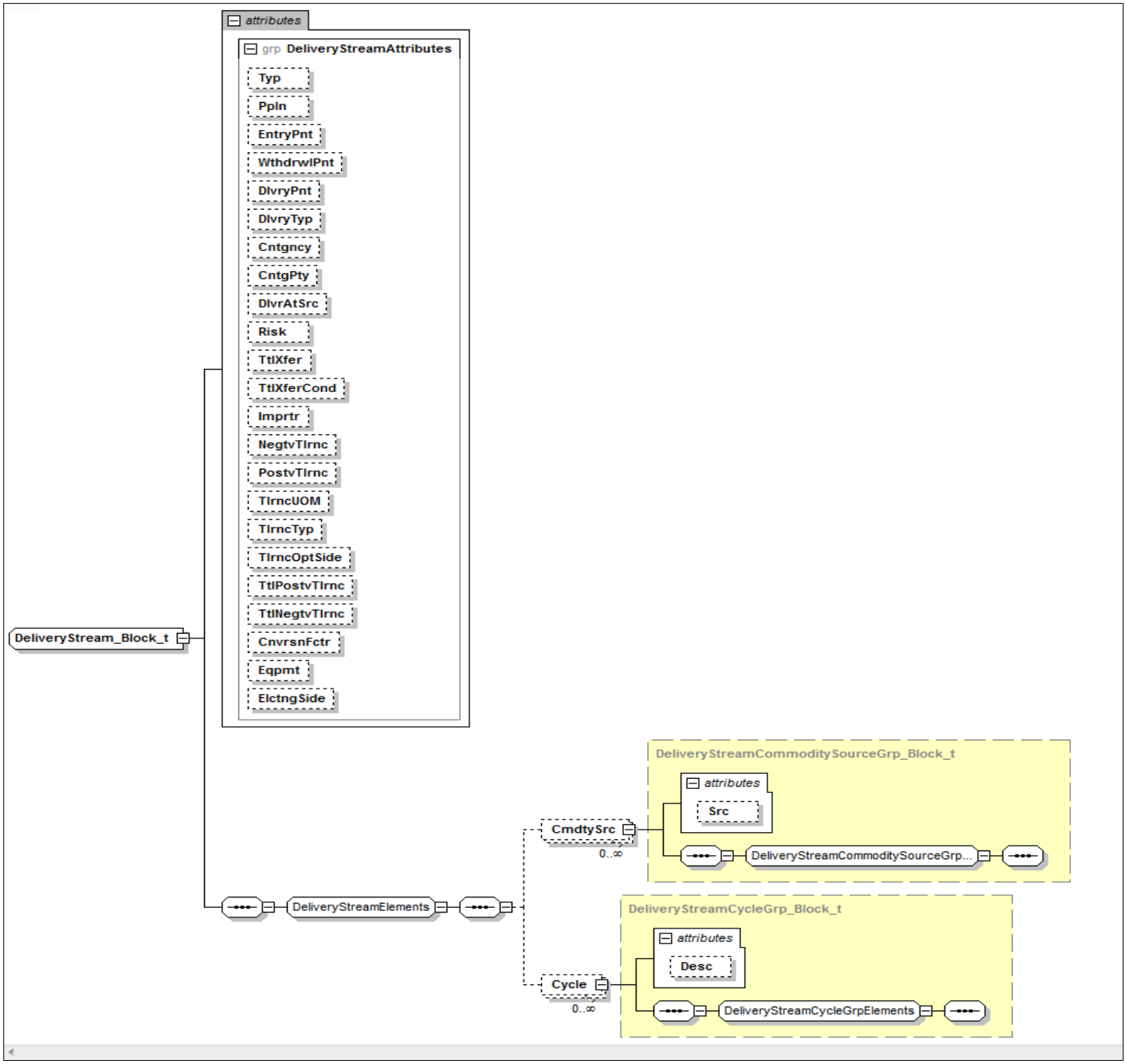
```
    <PmtStrm Typ="2">
        <Float Ndx="NYMEX Last Day Settlement"
           NdxLctn="Henry Hub"
           Spread="0.927500"/>
    </PmtStrm>
```

7.4.8 Delivery leg of a Commodity Swap

This section describes the delivery details that can be specified on the delivery leg of a commodity swap. The delivery leg of the swap is associated with the physical delivery of the swap.







Sample FIXML for specifying the delivery point associated with physical.

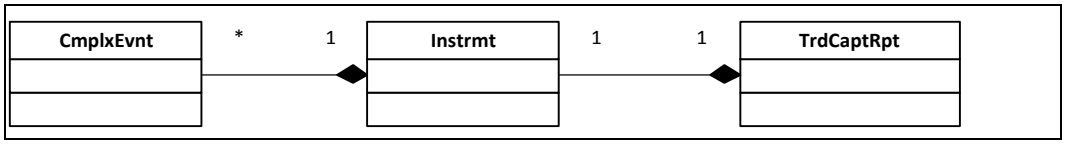
<Instrmt SecTyp="CMDTYSWAP">	
<Strm Typ="1"	Typ="1" means Physical Leg
PaySide="2"	PaySide is 2 = Sell
RcvSide="1"	Receive Side is 1 = Buy
NotlUOM="GJ"	Unit of Measure of the Delivery Stream Quantity
NotlPeriod="1"	Time Unit multiplier for the notional Frequency

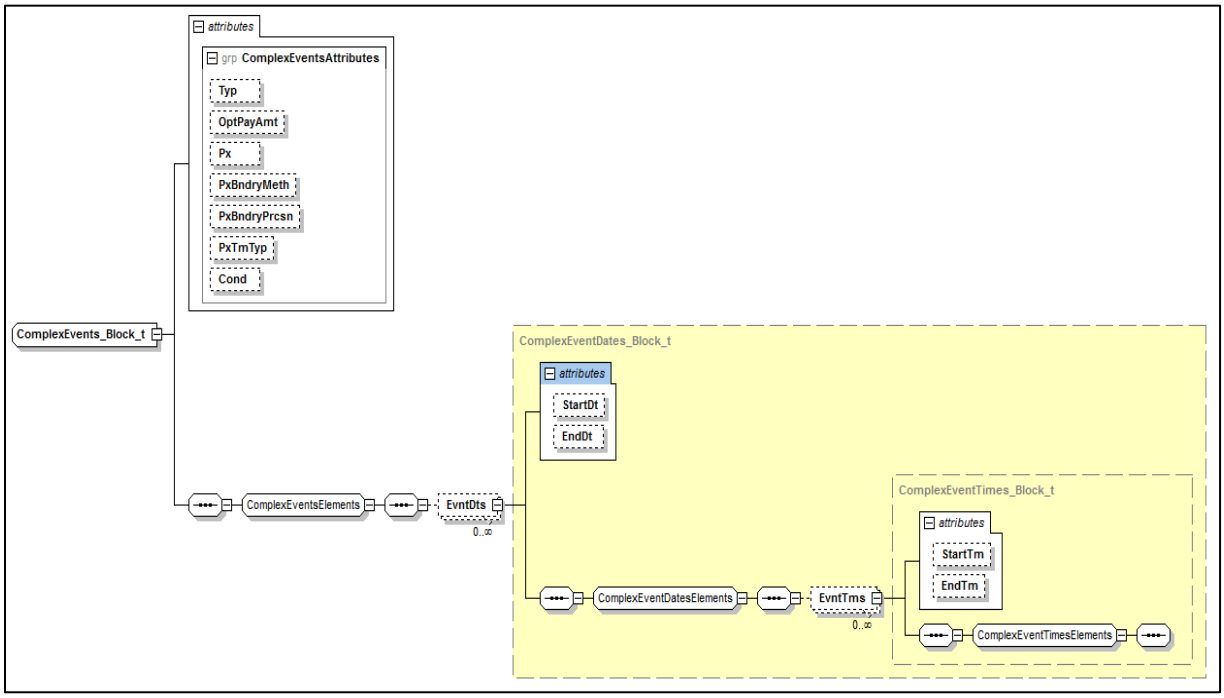
Notl="30000.00"	Notional Quantity associated with the delivery stream. (50 MWh/hr)
NotlUnit="D"	The Unit associated with the notional Period. D = Day
TotNotl="930000.00"	Total Notional or the Delivery quantity over the term of the contract.
TotNotlUOM="GJ">	Unit of Measure of the Delivery Stream total Quantity
<Cmdty Base=" Natural Gas "	
Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT), Excluding NERC Holidays">	
<SettlPrd TZ="EPT"/>	Commodity Delivery TImezone
</Cmdty>	
<EfctvDt Dt="2013-01-01"/>	Swap Effective Date
<TrmtnDt Dt="2013-12-31"/>	Swap Termination Date
<DlvryStrm DlvryPnt="Nova Inventory Transfer - Alberta"	Delivery Point or Delivery Location
DlvryTyp="1"/>	Specifies under what conditions the buyer and seller should be excused of their delivery obligations. DlvryTyp = 1 Firm (Never excused of delivery obligations)
</Strm>	
</Instrmt>	

7.5 Submitting Products details for non-CME listed Commodity Swaptions

7.5.1 Complex Event of Swaptions

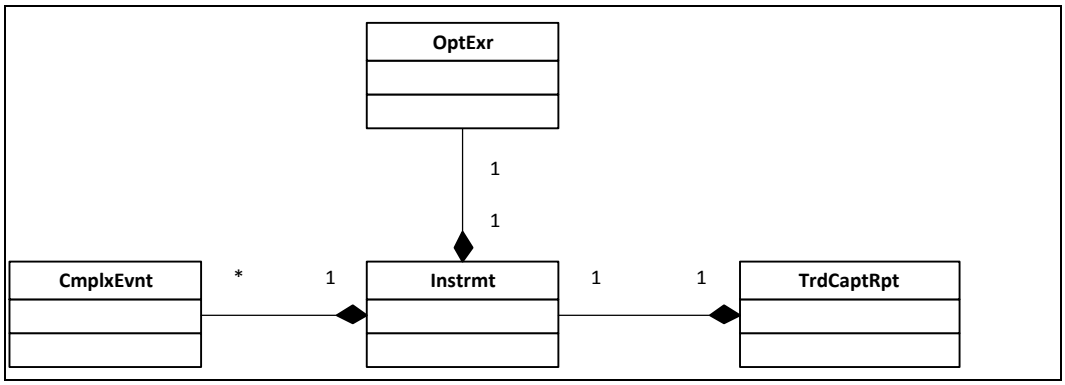
This component is used to specify events associated with Exotic Options and other details associated with the event. The Complex event type identifies the type of event like Knock-in, knock-out, capped etc.





7.5.2 Options Exercise of Swaptions

The OptionExercise component is a subcomponent of the Instrument component used to specify option exercise provisions.

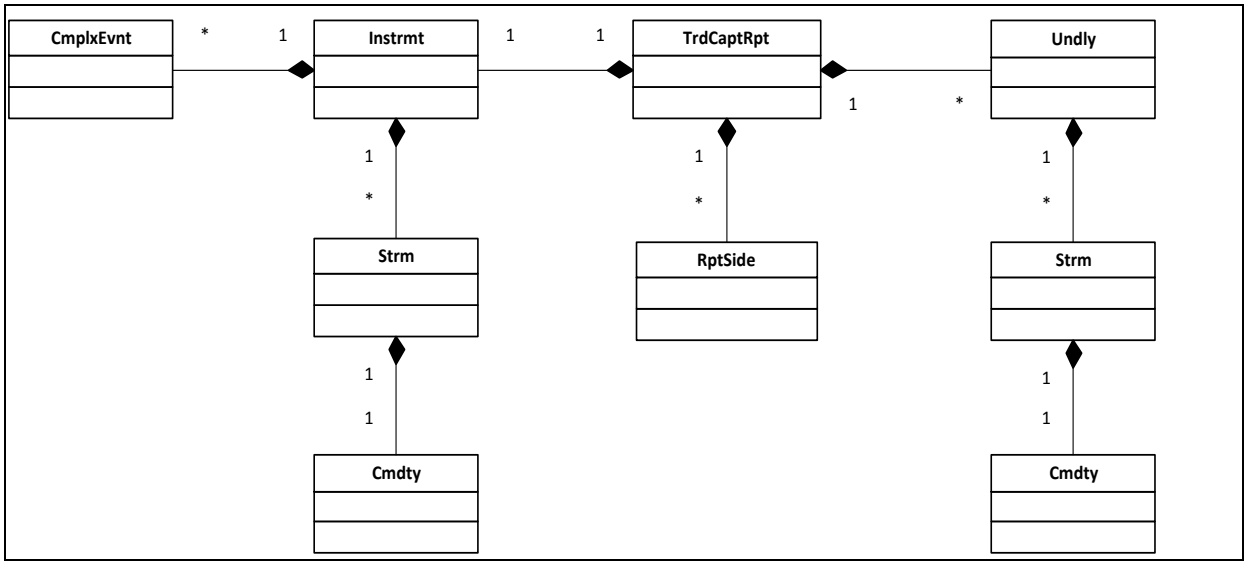


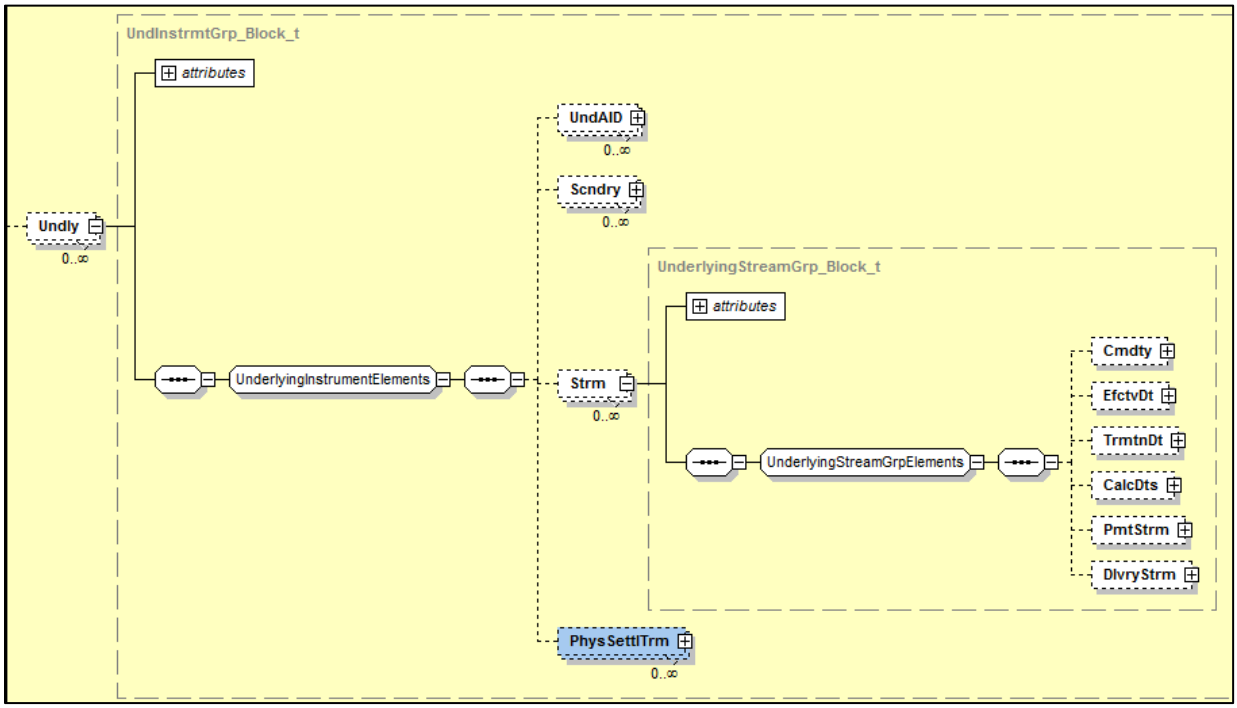
Sample Options Exercise

```
<!-- ExerStyle 0 = European. StgyTyp STD = Straddle -->
<Instrmt SecTyp="SWAPTION" StrkPx="3.300000" StrkCcy="USD" StrkUOM="MMBtu"
ExerStyle="0" StrtTyp="STD">
        <!-- NOTE: Just specifying Monthly. -->
        <OptExr>
            <Dts FreqPeriod="1" FreqUnit="Mo"/>
        </OptExr>
</Instrmt>
```

7.5.3 Underlying Swap details for a Commodity Swaption

This section describes the details of the Underlying Swap details for a Swaption.





7.6 Submitting additional Trade details on messages

R = Required
O = Optional
C = Conditional Required (See footnote for the condition)

Field	Description	Valid Value	R/O	XPath
Message ID	This can also be considered to be as the unique message Id for the Trade being reported. The Trade Report Id may be echoed back on the Acks in the RptRefID.		R	/TrdCaptRpt/@RptID
Transaction Type	Indicates the action being taken on a trade. The Acknowledgement echoes back the Trans Type from the inbound message.	0 = New 1 = Cancel 2 = Replace	R	/TrdCaptRpt/@TransTyp
Trade Report Type	Indicates the purpose of the trade within the workflow and determines the action of the receiver of the trade. For SDR submissions it will always be set to Submit	0 = Submit	R	/TrdCaptRpt/@RptTyp
Regulatory Report Type	Type of regulatory report being submitted.	0 = RT 1 = PET 3 = Confirm 4 = RT+PET 5 = PET+Confirm 6 = RT+PET+Confirm 7 = Post trade valuation 8 = Verification 9 = Post Trade Event 10 = Post Trade Event + RT	R	/TrdCaptRpt/@RegRptTyp
Trade Type	Specifies the type of trade being submitted to CME Clearing or reported by CME Clearing. Used to distinguish a significant difference in the regulatory or economic requirements surrounding the trade. Sample values are Regular Trade, Block Trade, Privately Negotiated, Transfer, EFR, EFS, EFP, OTC	58 = Large Notional Off Facility Swap 22 = OTC Privately negotiated Trade 12 = EFR/EFS/EOO	R	TrdCaptRpt/@TrdTyp
Trade Sub Type	This field further qualifies the Trade Type. Conditionally Required: Aged Deal (36)	36 = Aged Deal	O	TrdCaptRpt/@TrdSubTyp

Trade Continuation	Specifies the post-execution trade continuation event. Additional price-forming continutation data values may be used by mutual agreement of the counterparties.	0 = Novation 1 = Partial Novation 2 = Swap Unwind 3 = Partial Swap Unwind 4 = Exercise 8 = Amendment 9 = Increase 15 = Withdrawal 16 = Void	C[2]	TrdCaptRpt/@TrdContntn
Trade Clearing Instruction	Specifies the eligibility of this trade for clearing and central counterparty processing.	6 = Clear against CCP 7 = Exclude from CCP	O	TrdCaptRpt/@ClrngInstrctn
Historical Swap Indicator	When this element is specified and set to 'Y', indicates this report is of a historical trade or event.	Y N	C[3]	TrdCaptRpt/@ HstrclRpt
Trade Date	The trade date assigned to an execution on the trading platform.		R	/TrdCaptRpt/@TrdDt
Original Trade Date	Used to capture original trade date if specified as an Aged deal. Conditionally required while submitting non top day trades.		C[4]	/TrdCaptRpt/@OrigTrdDt
Price Type	Price Notion or used to indicate how the price is represented on the trade	1 = Percentage 2 = Per unit 3 = Fixed Amount 6 = Spread (basis points) 9 = Yield 10 = Fixed cabinet trade price 11 = Variable cabinet trade price 20 = Normal rate representation 21 = Inverse rate representation	R	/TrdCaptRpt/@PxTyp
Multi Leg Type	Used to indicate how the multi-legged security (e.g. option strategies, spreads, etc.) is being reported	1 = Outright 2 = Leg of a Spread	O	TrdCaptRpt/MLegRptTyp
Confirmation Method	Indication of how a trade was confirmed.	0 = Non Electronic 1 = Electronic	O	TrdCaptRpt/@ CnfmMeth
Verification Method	Indication of how a trade was verified.	0 = Non Electronic 1 = Electronic	O	TrdCaptRpt/@VerfctnMeth

[2] Conditionally required for some post trade event.
[3] Conditionally required while reporting historical Swaps
[4] Conditionally required for aged deals.

7.7 Message Headers

7.7.1 Version Attributes for All Messages

The following attributes must be included on the FIXML element of each message sent to the API.

Field	Description	Valid Value	XPath
FIX Version Number	Indicates the version of FIX being used (including Service Pack).	5.0 SP2	/FIXML/@v
FIXML Extension Version	Indicates the FIX Extension version.	162	/FIXML/@xv
Custom Application Version	Indicates the Custom Application version.	CME.0001	/FIXML/@cv

7.7.2 Standard Header for Request and Submissions

Field	Description	Valid Value	XPath
Sender ID	This attribute identifies the party or the Submitter of the message. The value is assigned by CME.	SENDER	/FIXML/TrdCaptRpt/Hdr/@SID
Sender Qualifier	This attribute qualifies the Sender. The user ID assigned to the sender must be provided.	User123	/FIXML/TrdCaptRpt/Hdr/@SSub
Target ID	This attribute identifies the receiver of the message. This must be set to CME.	CME	/FIXML/TrdCaptRpt/Hdr/@TID
Target Qualifier	This qualifies the receiver of the message. For submitting trades directly to CME RS T this must be set to CMESDR.	CMESDR	/FIXML/TrdCaptRpt/Hdr/@TSub

7.7.3 Standard Header for Responses

Field	Description	Example	XPath
Sender ID	This attribute identifies the party or the Submitter of the message. This is set to CME.	CME	/FIXML/TrdCaptRpt/Hdr/@SID
Sender Qualifier	This attribute qualifies the Sender. For messages sent	CMESDR	/FIXML/TrdCaptRpt/Hdr/@SSub

Field	Description	Example	XPath
	by the CME ClearPort API this is set to CPAPI.		
Target ID	This attribute identifies the receiver of the message. This could be a Broker or Platform or any other valid Trading entity. This value is pre-assigned by CME.	TARGET	/FIXML/TrdCaptRpt/Hdr/@TID
Target Qualifier	This qualifies the receiver of the message. This is set to the CME ClearPort UserID of the Sender.	User123	/FIXML/TrdCaptRpt/Hdr/@TSub

8 RT and PET field mapping

8.1 RT (Part 43) field Mapping to FIXML

R – Required for the
O – Optional
C – Conditionally required (Refer to the appropriate Footnote)
N/A – Not Applicable

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
1.	Message Type (Cancellation, Correction, Price-forming continuation data)	/TrdCaptRpt/ @TransTyp	0 = New	R	R	R
		/TrdCaptRpt/ @RptTyp	0 = Submit	R	R	R
		/TrdCaptRpt/ @RegRptTyp	0 = RT	R	R	R
2.	Execution timestamp	TrdCaptRpt/ TrdRegTS/@TS TrdCaptRpt/ TrdRegTS/@Typ = 0	0 – Execution Time	R	R	R
3.	SDR Submission Time	TrdCaptRpt/Hdr/@Snt		R	R	R
4.	Clearing indicator	TrdCaptRpt/ClrIntn	0 = Do not Intend to clear 1 = Intend to clear	R	R	R
5.	Collateralization	TrdCaptRpt/ @TrdCollztn	0 = Uncollateralized 1 = Partially Collateralized 2 = One-way Collateralization 3 = Fully collateralized	C[5]	C	C
6.	End-user Exception	TrdCaptRpt/ @ClrReqmtExcptn	0 = No Execption 1 = Exception	C[6]	C	C
7.	Bespoke Swap Indicator	TrdCaptRpt/Instrmt/ @SecTyp	CMDTYSWAP = Commodity Swap SWAPTION = Swaption FWD = Derivative Forward	R	R	R
		TrdCaptRpt/Instrmt/ @SubTyp	NS = Non Standardized Swap	O	O	O

[5] Conditionally required for tardes that will not be cleared or trades cleared at a different DCO.
[6] Conditionally required for trades that will not be cleared

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
8.	Block/Off Facility	TrdCaptRpt/@TrdTyp	58 = Large Notional Off Facility Swap 22 = OTC Privately negotiated Trade 12 = EFR/EFS/EOO	R	R	R
9.	Execution Venue	TrdCaptRpt/ @VenuTyp	O = Off Facility S = SEF	R	R	R
		TrdCaptRpt/Pty/ @R	73 = Swap Execution Facility (SEF)	C[7]	C	C
10.	Swap Effective or Start Date	/TrdCaptRpt/Instrmt/ Strm/EfctvDt/@Dt		C[8]	C	C
		/TrdCaptRpt/Instrmt/ Strm/Typ	0 = Payment/Cash Settlement 1 = Physical Delivery	C[9]	C	C
11.	Swap Termination or End Date	/TrdCaptRpt/Instrmt/ Strm/TrmtnDt/@Dt		C[10]	C	C
12.	Day count convention	/TrdCaptRpt/Instrmt/ Strm/PmtStrm/@DayCnt OR /TrdCaptRpt/Instrmt /@CpnDayCnt	0 = 1/1 1 = 30/360 (30U/360) 2 = 30/360 (SIA) 3 = 30/360M 4 = 30E/360 5 = 30E/360.ISDA 6 = Act/360 7 = Act/365.FIXED 8 = Act/Act.AFB 9 = Act/Act.ICMA (Act/Act) 10 = Act/Act.ISMA Ultimo 11 = Act/Act.ISDA 12 = BUS/252 13 = 30E+/360 14 = Act/365L 15 = NL365 16 = NL360	O	O	O
		/TrdCaptRpt/Instrmt/ Strm/PmtStrm/@Typ	0 – Periodic 1 = Initial 2 = Single	C[11]	C	C
13.	Settlement Currency	/TrdCaptRpt/ @SettlCcy		R	R	R

[7] Conditionally required if theVenueType is a SEF
[8] Conditionally required for tardes that will not be cleared or trades cleared at a different DCO.
[9] Conditionally required if the Stream Effective date and Stream Termination Date are present.
[10] Conditionally required for tardes that will not be cleared or trades cleared at a different DCO.
[11] Conditionally required if the payment stream /PmpStrm/ component is used.

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
14.	Asset class	TrdCaptRpt/Instrmt/@AssetClss	5 = Commodity	R	R	R
15.	Sub-Asset class	TrdCaptRpt/Instrmt/@AssetSubClss	13 = Metal 14 = Bullion 15 = Energy 16 = Index 17 = Ags 18 = Environmental 19 = Freight	R	R	R
16.	Contract type	TrdCaptRpt/Instrmt/@SecTyp	CMDTYSWAP = Commodity Swap SWAPTION = Swaption FWD = Derivative Forward OPT = Option	R	R	R
17.	Contract Sub-Type	TrdCaptRpt/Instrmt/@SwapTyp	BS = Basis swap IX = Index swap BB = Broad-based security swap SK = Bask swap	O	O	O
18.	Underlying Asset 1	TrdCaptRpt/Undly/@ID		C[12]	C	C
		TrdCaptRpt/Undly/@Src	H = Clearing House 8 = Exchange Symbol N = LEI	C	C	C
		/TrdCaptRpt/Undly/Strm/Cmdty/@Base		C	C	C[13]
		/TrdCaptRpt/Undly/Strm/Cmdty/@Desc		C	C	C
19.	Underlying Asset 2	TrdCaptRpt/Undly/@ID		O	O	O
		TrdCaptRpt/Undly/@Src		C	C	C
20.	Price Notation	TrdCaptRpt/@PxTyp	1 = Percentage 2 = Per unit 3 = Fixed Amount 6 = Spread (basis points) 9 = Yield 10 = Fixed cabinet trade price 11 = Variable	O	O	O

[12] Underlying Securidy Id is required if the Swaps is based on an Exchange defined underlying.
[13] Conditionally required if the Underlying SecurityID and Underlying Security ID Src is not provided. The Stream attributes will be typically used when the Underlying is not based on an Exchange defined contract.

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
			cabinet trade price 20 = Normal rate representation 21 = Inverse rate representation			
		TrdCaptRpt/@LastPx		C[14]	C	C
21.	Additional Price Notation	/TrdCaptRpt/Pmt/@Typ		C[15]	C	C
		/TrdCaptRpt/Pmt/@Amt		C	C	C
22.	UPI	TrdCaptRpt/Instrmt/@ID		C[16]	C	C
23.	Currency 1 (base)	TrdCaptRpt/Instrmt/Strm/Ccy		C[17]	C	C
24.	Currency 2 (counter)			N/A	N/A	N/A
25.	Notional amount 1 (for Currency 1)	/TrdCaptRpt/Strm/Notl		R	R	R
26.	Notional amount 2 (for Currency 2)			N/A	N/A	N/A
27.	Payment Frequency 1	TrdCaptRpt/Strm/PmtStrm/@Typ	0 = Periodic 1 = Initial 2 = Single	R	R	R
		TrdCaptRpt/Strm/PmtStrm/PmtDts/@FreqPeriod		R	R	R
		TrdCaptRpt/Strm/PmtStrm/PmtDts/@FreqUnit	D=Day Wk = Week Mo=Month Yr = Year T = Term	R	R	R
28.	Payment Frequency 2	TrdCaptRpt/Strm/PmtStrm/@Typ	0 = Periodic 1 = Initial 2 = Single	O	O	O
		TrdCaptRpt/Strm/PmtStrm/PmtDts/@FreqPeriod		O	O	O
		TrdCaptRpt/Strm/PmtStrm/PmtDts/@FreqUnit	D=Day Wk = Week Mo=Month Yr = Year T = Term	O	O	O

[14] Conditionally required for CME Cleared products.
[15] Conditionally required if there is an additional payment
[16] This is conditionally required for CME listed products.
[17] This is conditionally required Cash settled Streams (non nddeded for physical streams)

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
29.	Reset Payment Frequency 1			N/A	N/A	N/A
30.	Reset Payment Frequency 2			N/A	N/A	N/A
31.	Event Time	TrdCaptRpt/@TxnTm		R	R	R
32.	Option Strike	TrdCaptRpt/Instrmt/@StrkPx		N/A	N/A	R
		TrdCaptRpt/TrdLeg/Leg/@Strk[18]				
33.	Option type	TrdCaptRpt/Instrmt/@PutCall	0 = Put 1 = Call	N/A	N/A	R
		TrdCaptRpt/Instrmt/CmplxEvnt/@Typ	1 = Capped 2 = Trigger 3 = Knock-in up 4 = Knock-in down 5 = Knock-out up 6 = Knock-out down 7 = Underlying 8 = Reset barrier 9 = Rolling barrier 10 = One-touch 11 = No-touch 12 = Double one-touch 13 = Double no-touch	N/A	N/A	O
34.		TrdCaptRpt/Instrmt@StgyTyp	CAP = Cap FLRS = Floors CLLR = Collar STD = Straddle STG = Strangle BF = Butterfly CNDR = Condor CISN = Callable inverse snowball OTHR = Other	N/A	N/A	O
35.	Option Exercise Style	TrdCaptRpt/Instrmt/@ExerStyle	0 = European 1 = American 2 = Bermuda	N/A	N/A	R
36.		TrdCaptRpt/TrdLeg/Leg@ExerStyle				C[19]
37.	Option premium	TrdCaptRpt/Pmt/@Typ	10 = Option Premium	N/A	N/A	R

[18] This mapping is only relevant for embedded options.
[19] Conditionally required for embedded options

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
38.		TrdCaptRpt/Pmt/@Amt		N/A	N/A	R
39.	Option currency	TrdCaptRpt/Pmt/@Ccy		N/A	N/A	R
40.	Option expiration date	TrdCaptRpt/Instrmt/@MMY		N/A	N/A	R
41.	Option Lockout Period	TrdCaptRpt/Instrmt/Evnt/@Typ	25 = First Exercise Date	N/A	N/A	C
42.	Embedded Option	TrdLeg/Leg/@SecTyp	OPT = Option	N/A	N/A	O

8.2 PET (Part 45) field Mapping to FIXML

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
1.	Message Type (Cancellation, Correction, Price-forming continuation data)	TrdCaptRpt/ @TransTyp	0 = New 1 = Cancel 2 = Replace	R	R	R
		TrdCaptRpt/ @RptTyp	0 = Submit	R	R	R
		TrdCaptRpt/ @RegRptTyp	4 = RT[20] + PET 1 = PET	R	R	R
2.	Universal Swap Identifier (The USI will have to include the Type of USI and a Source which identifies the assigner (namespace) of the USI)	TrdCaptRpt/RegTrdID/@Typ	0 = Current USI	R	R	R
		TrdCaptRpt/RegTrdID/@ID		R	R	R
		TrdCaptRpt/RegTrdID/@Src		R	R	R

[20] Need to support all the attributes in Part 43 that are not in this table.

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		TrdCaptRpt/RegTrdID/@Evnt	0 = Initial Block Trade 1 = Allocation 2 = Clearing	O	O	O
3.	LEI of the Counterparty	TrdCaptRpt/RptSide/Pty/@Src	N = LEI (Legal Entity Identifier)	R	R	R
		TrdCaptRpt/RptSide/Pty/@R	R = 7	R	R	R
		TrdCaptRpt/RptSide/Pty/@ID		R	R	R
4.	Reporting Counterparty Indicator (The Reporting counterparty identifier	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 49 – Counterparty is a Reporting Counterparty	R[21]	R	R
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	R	R	R
5.	Swap Dealer Indicator for the Reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 45 – Swap Dealer	C[22]	C	C
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
6.	Major Swap Participant Indicator for the reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 46 – Major Swap Participant	C[23]	C	C
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
7.	Financial Entity Indicator for the reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 47 – Financial Entity	C[24]	C	C

[21] The Reporting counterparty is specified as a sub tag of the counterparty to the trade.
[22] This is conditionally required if the reporting counterparty is a Swap Dealer.
[23] This is conditionally required if the reporting counterparty is an MSP.
24 This is conditionally required if the reporting counterparty is not a swap dealer or a major swap participant with respect to the swap, an indication of whether the reporting counterparty is a financial entity as defined in CEA § 2(h)(7)(C).

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
8.	US Person Flag for the reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 48 – US Domicile	C[25]	C	C
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
9.	Indication that the block will be allocated	TrdCaptRpt/RptSide/@BlckTrdAllocInd	0 = Block to be allocated	C[26]	C	C
10.	LEI of the Allocation agent	TrdCaptRpt/RptSide/Pty/@Src	N = LEI (Legal Entity Identifier)	C[27]	C	C
		TrdCaptRpt/RptSide/Pty/@R	R = 30 – Broker R = 49 – Asset manager	C	C	C
		TrdCaptRpt/RptSide/Pty/@ID		C	C	C
11.	Post allocation Swap Indicator	TrdCaptRpt/RptSide/@BlckTrdAllocInd	2 = Allocated Block trade	C[28]	C	C
12.	Block USI[29]	TrdCaptRpt/RegTrdID/@Typ	2 = Block USI	C[30]	C	C
		TrdCaptRpt/RegTrdID/@ID		C	C	C
		TrdCaptRpt/RegTrdID/@Src		C	C	C

25 This is conditionally required if the reporting counterparty is a U.S. person.
26 Conditionally required if the side will be allocated
27 The Agent/Asset mamager is conditionally required for allocated swaps.
28 Conditionally required if the swap is an allocated swap
29 If the swap is a post-allocation swap, the unique swap identifier of the original transaction between the reporting counterparty and the agent
30 Conditionally required if the swap is an allocated swap

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		TrdCaptRpt/RegTrdID/@Evnt	0 = Initial Block Trade	O	O	O
13.	Non Reporting Counterparty LEI[31]	TrdCaptRpt/RptSide/Pty/@Src	N = LEI (Legal Entity Identifier)	R	R	R
		TrdCaptRpt/RptSide/Pty/@R	R = 7	R	R	R
		TrdCaptRpt/RptSide/Pty/@ID		R	R	R
14.	Swap Dealer Indicator for the non-Reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 45 – Swap Dealer	C[32]	C	C
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
15.	Major Swap Participant Indicator for the non-reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 46 – Major Swap Participant	C[33]	C	C
16.		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
17.	Financial Entity Indicator for the reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 47 – Major Swap Participant	C[34]	C	C
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
18.	US Person Flag for the non-reporting counterparty	TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 48 – US Domicile	C[35]	C	C

[31] If the Reporting counterparty indicator is not present, the counterparty is treated as the non-reporting counterparty.
[32] This is conditionally required if the non-reporting counterparty is a Swap Dealer.
[33] This is conditionally required if the non-reporting counterparty is an MSP.
34 This is conditionally required if the non-reporting counterparty is not a swap dealer or a major swap participant with respect to the swap, an indication of whether the reporting counterparty is a financial entity as defined in CEA § 2(h)(7)(C).
35 This is conditionally required if thenon- reporting counterparty is a U.S. person.

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		TrdCaptRpt/RptSide/Pty/Sub/@ID	Y	C	C	C
19.	UPI	TrdCaptRpt/Instrmt/@ID		C[36]	C	C
		TrdCaptRpt/Instrmt/@Src	H = Clearing House	C[37]	C	C
20.	If no Unique Product Identifier is available for the swap because the swap is not sufficiently standardized, the taxonomic description of the swap pursuant to the CFTC-approved product classification system	N/A[38]				
21.	If no CFTC-approved UPI and product classification system is yet available, the internal product identifier or product description used by the swap data repository	N/A[39]				
22.	Multi Asset Swap Indicator	Presence of a Secondary Asset class.				
23.	Primary Asset Class for a multi asset	/Instrmt/@AssetClss	1 = Interest Rate 2 = Currency 3 = Credit 4 = Equity 5 = Commodity	C[40]	C	C
24.	Secondary Asset Class for a multi asset	TrdCaptRpt/Instrmt/ScndryAsset/@Clss	1 = Interest Rate 2 = Currency 3 = Credit 4 = Equity	C[41]	C	C

[36] This is conditionally required for exchange listed instruments
[37] Conditionally required the security ID is specified
[38] This is not required Day 1 because this maps to the /Instrmt/@ID and /Instrmt/@Src for exchange listed products.
[39] This is not required Day 1 because this maps to the /Instrmt/@ID and /Instrmt/@Src for exchange listed products.
[40] Conditionally required for a multi Asset class Swap
[41] Conditionally required if a multi asset swap is being reported

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
			5 = Commodity			
25.	Mixed Swap Indicator	TrdCaptRpt/@MixedSwapInd	0 = not a mixed swap 1 = a mixed swap	C[42]	C	C
26.	Contract Type	TrdCaptRpt/Instrmt/@SecTyp	CMDTYSWAP = Commodity Swap SWAPTION = Swaption FWD = Derivative Forward OPT = Option	R	R	R
27.	Contract Sub-Type	TrdCaptRpt/Instrmt/@SwapTyp	BS = Basis swap IX = Index swap BB = Broad-based security swap SK = Bask swap	O	O	O
28.	Block/Off Facility	TrdCaptRpt/@TrdTyp	58 = Large Notional Off Facility Swap 22 = OTC Privately negotiated Trade 12 = EFR/EFS/EOO	R	R	R
29.	Execution timestamp	TrdCaptRpt/ TrdRegTS/@TS TrdCaptRpt/ TrdRegTS/@Typ = 0	0 – Execution Time	R	R	R
30.	Execution Venue	TrdCaptRpt/ @VenuTyp	O = Off Facility S = SEF	R	R	R
		TrdCaptRpt/Pty/ @R	73 = Swap Execution Facility (SEF)	C[43]	C	C
31.	SDR Submission Time	TrdCaptRpt/Hdr/@Snt		R	R	R
32.	Swap Effective or Start Date	/TrdCaptRpt/Instrmt/Strm/EfctvDt/@Dt		C[44]	C	C
		/TrdCaptRpt/Instrmt/Strm/Typ	0 = Payment/Cash Settlement 1 = Physical Delivery	C[45]	C	C

[42] Conditionally required for a mixed asset swap.
[43] Conditionally required if theVenueType is a SEF
[44] Conditionally required for tardes that will not be cleared or trades cleared at a different DCO.
[45] Conditionally required if the Stream Effective date and Stream Termination Date are present.

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
33.	Swap Termination or End Date	/TrdCaptRpt/Instrmt/Strm/TrmtnDt/@Dt		C[46]	C	C
34.	Buyer[47]	TrdCaptRpt/RptSide/@Side	1 = Buyer	R	R	R
		TrdCaptRpt/RptSide/Pty/@Src	N = LEI (Legal Entity Identifier)	R	R	R
		TrdCaptRpt/RptSide/Pty/@R	R = 7	R	R	R
		TrdCaptRpt/RptSide/Pty/@ID		R	R	R
35.	Seller[48]	TrdCaptRpt/RptSide/@Side	2 = Seller	R	R	R
		TrdCaptRpt/RptSide/Pty/@Src	N = LEI (Legal Entity Identifier)	R	R	R
		TrdCaptRpt/RptSide/Pty/@R	R = 7	R	R	R
		TrdCaptRpt/RptSide/Pty/@ID		R	R	R
36.	Quantity unit[49]	TrdCaptRpt/Instrmt/Strm/NotlUOM		C[50]	C	C
37.	Quantity[51]	TrdCaptRpt/@LastQty		R[52]	R	R
		TrdCaptRpt/Instrmt/Strm/Notl		C[53]	C	C
		TrdCaptRpt/Instrmt/Strm/Ccy		C	C	C
38.	Quantity Frequency[54]	TrdCaptRpt/Instrmt/Strm/@NotlPeriod		R	R	N/A
39.		TrdCaptRpt/Instrmt/Strm/@NotlUnit	D = Day Wk = Week Mo = Month Yr = Year H = Hour	R	R	N/A
40.	Total Quantity[55]	TrdCaptRpt/Instrmt/Strm/@TotNotl		C	C	N/A

[46] Conditionally required for tardes that will not be cleared or trades cleared at a different DCO.
[47] The counterparty purchasing the product: e.g. the payer of the fixed price (for a swap), or the payer of the flowing price on the underlying swap (for a put swaption), or the payer of the fixed price on the underlying swap (for a call swaption). Each RptSide will need to have the LEI of the Counterparty in Party Role 7.
[48] The counterparty offering the product: e.g. the payer of the floating price (for a swap), or the payer of the fixed price on the underlying swap (for a put swaption), or the payer of the floating price on the underlying swap (for a call swaption).
[49] The unit of measure applicable for the quantity on the swap. E.g. barrels, bushels, gallons, pounds, tons.
[50] Conditionally required for products not cleared at CME. For prodiucts cleared at CME this information can be derived from the contract spec.
[51] The amount of the commodity (the number of quantity units) quoted on the swap.
52 Required for trades cleared at CME
[53] Required for trades that are not cleared at CME or if the LastQty is not specified
[54] The rate at which the quantity is quoted on the swap. E.g. hourly, daily, weekly, monthly
[55] Total notional or delivery quantity over the term of the contract.

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		TrdCaptRpt/Undly/Strm/@TotNotl		N/A	N/A	C[56]
41.	Settlement Method	TrdCaptRpt/Instrmt/SettlMeth	C = Cash P = Physical	R	R	R
42.	Price[57]	TrdCaptRpt/@LastPx		C[58]	C	C
43.	Options Strike	TrdCaptRpt/Instrmt/@StrkPx		N/A	N/A	R
44.	Price Unit[59]	TrdCaptRpt/Instrmt/@PxUOM		R	R	R
45.	Price Currency	TrdCaptRpt/Instrmt/@PxQteCcy		O	O	O
46.	Buyer Pay Index[60]	TrdCaptRpt/Instrmt/Strm@PaySide=1	PaySide - 1 = Buy	C[61]	C	C
		TrdCaptRpt/Instrmt/Strm/PmtStrm/Float/@Ndx		C	C	C
47.	Buyer Pay Index Location	TrdCaptRpt/Instrmt/Strm/PmtStrm/Float/@NdxLctn		C	C	C
48.	Buyer Pay Averaging method[62]	TrdCaptRpt/Instrmt/Strm@PaySide=1		C[63]	C	C
		TrdCaptRpt/Instrmt/Strm/PmtStrm/Float/@AvgMeth	0 = Unweighted 1 = Weighted	C	C	C
49.	Seller Pay Index[64]	TrdCaptRpt/Instrmt/Strm@PaySide=2	PaySide - 2 = Sell	C[65]	C	C
		TrdCaptRpt/Instrmt/Strm/PmtStrm/Float/@Ndx		C	C	C
50.	Seller Pay Index Location	TrdCaptRpt/Instrmt/Strm/PmtStrm/Float/@NdxLctn		C	C	C
51.	Seller Pay Averaging	TrdCaptRpt/Instrmt/Strm@PaySide=1		C[67]	C	C

[56] Conditionally required if the Swaption Underlying has a delivery stream.
[57] The price of the swap. For options, the strike price.
[58] Conditionally required for CME Cleared listed products
[59] The unit of measure applicable for the price of the swap.
[60] The published price as paid by the buyer (if applicable). For swaptions, applies to the underlying swap
[61] Conditionally required for floating rate streams
[62] The averaging method used to calculate the index of the buyer pay index. For swaptions, applies to the underlying swap
[63] Conditionally required if averaging is used to derive the price
[64] The published price as paid by the buyer (if applicable). For swaptions, applies to the underlying swap
[65] Conditionally required for floating rate streams
[67] Conditionally required if averaging is used to derive the price

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
	method[66]					
		TrdCaptRpt/Instrmt/Strm/PmtStrm/Float/@AvgMeth	0 = Unweighted 1 = Weighted	C	C	C
52.	Grade[68]	TrdCaptRpt/Instrmt/Strm/Cmdty/AssetAttrib/@Typ	Typ="Grade"	O	O	O
		TrdCaptRpt/Instrmt/Strm/Cmdty/AssetAttrib/@Val				
53.	Option type	TrdCaptRpt/Instrmt/@PutCall	0 = Put 1 = Call	N/A	N/A	R
		TrdCaptRpt/Instrmt/CmplxEvnt/@Typ	1 = Capped 2 = Trigger 3 = Knock-in up 4 = Knock-in down 5 = Knock-out up 6 = Knock-out down 7 = Underlying 8 = Reset barrier 9 = Rolling barrier 10 = One-touch 11 = No-touch 12 = Double one-touch 13 = Double no-touch	N/A	N/A	O
54.		TrdCaptRpt/Instrmt@StgyTyp	CAP = Cap FLRS = Floors CLLR = Collar STD = Straddle STG = Strangle BF = Butterfly CNDR = Condor CISN = Callable inverse snowball OTHR = Other	N/A	N/A	O
55.	Option Exercise Style	TrdCaptRpt/Instrmt/@ExerStyle	0 = European 1 = American 2 = Bermuda	N/A	N/A	R
		TrdCaptRpt/TrdLeg/Leg@ExerStyle				C[69]
56.	Option premium	TrdCaptRpt/Pmt/@Typ	10 = Option Premium	N/A	N/A	R

[66] The averaging method used to calculate the index of the seller pay index. For swaptions, applies to the underlying swap
[68] If applicable the grade of the commodity to be delivered, e.g. the grade of oil or refined product
[69] Conditionally required for embedded options

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		TrdCaptRpt/Pmt/@Amt		N/A	N/A	R
57.	Option currency	TrdCaptRpt/Pmt/@Ccy		N/A	N/A	R
58.	Hours from and Thru[70]	Instrmt/Strm/Cmdty/SettlPrd/Day/Time/@Start		O	O	O
		Instrmt/Strm/Cmdty/SettlPrd/Day/Time/@End		O	O	O
		TrdCaptRpt/Instrmt/Strm/Cmdty/ SettlPrd /Ctry		O	O	O
	Hours from through time zone	Instrmt/@Strm/Cmdty/SettlPrd/@TZ		O	O	O
	Days of Week[71]	TrdCaptRpt/Instrmt/Strm/Cmdty/ SettlPrd /Day/Day	1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday 6 = Saturday 7 = Sunday 8 = All weekdays 9 = All days 10 = All weekends	O	O	O
59.		TrdCaptRpt/Instrmt/Strm/Cmdty/SettlPrd/TotHrs		O	O	O
60.	Load Type[72]	TrdCaptRpt/Instrmt/Strm/Cmdty/ SettlPrd /@FlowTyp	0 = All times 1 = On Peak 2 = Off Peak 3 = Base			
61.	Clearing indicator	TrdCaptRpt/@ClrIntntn	0 = Do not Intend to clear 1 = Intend to clear	R	R	R
62.	Clearing Venue[73]	TrdCaptRpt/Pty/@R	21 = Clearing Org	C	C	C
		TrdCaptRpt/Pty/@ID				
		TrdCaptRpt/Pty/@Src	N = LEI			
63.	Clearing Exemption Indicator[74]	TrdCaptRpt/@ClrRegmtExcptn		C	C	C
64.	Clearing Exemption Counterparty[75]	TrdCaptRpt/RptSide/Pty/@Src	N = LEI (Legal Entity Identifier)	R	R	R
		TrdCaptRpt/RptSide/Pty/@R	R = 7	R	R	R
		TrdCaptRpt/RptSide/Pty/		R	R	R

[70] For electric power, the hours of the day for which the swap is effective.
[71] For electric power, the profile applicable for the delivery of power.
[72] For electric power, the load profile for the delivery of power.
[73] The clearing venue is conditionally required if the trade will be cleared at a different DCO. This will carry the identity of the DCO where the trade will be cleared
[74] If the swap will not be cleared, an indication of whether the clearing requirement exception in CEA § (2)(h)(7) was elected
[75] The identity of the counterparty electing the clearing requirement exception in CEA § (2)(h)(7)

#	Data Field	FIXML Mapping	Supported Enums	Cmdty Forward	Cmdty Swap	Cmdty Swaptions
		@R				
		TrdCaptRpt/RptSide/Pty/Sub/@Typ	Typ= 50 – Elected Clearing Exemption	C[76]	C	C
65.	Collateralization Indicator	TrdCaptRpt/@TrdCollzTn	0 = Uncollateralized 1 = Partially Collateralized 2 = One-way Collateralization 3 = Fully collateralized	C[77]	C	C

[76] Conditionally required if the clearing exemption is set to Y

[77] Conditionally required for tardes that will not be cleared or trades cleared at a different DCO.

9 Appendix A

9.1 Component Definitions used in FIXML Messages

9.1.1 Business Center Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
DtAdjmt				
Business Day Convention	BizDayCnvtn	int	The business day convention used for adjusting dates. The value defined here applies to all adjustable dates in the instrument unless specifically overridden.	0 = Not applicable 1 = None 2 = Following day 3 = Floating rate note 4 = Modified following day 5 = Preceding day 6 = Modified preceding day 7 = Nearest day

Date Roll Convention	Roll	String	The convention for determining a sequence of dates. It is used in conjunction with a specified frequency. The value defined here applies to all adjustable dates in the instrument unless specifically overridden.	1 = 1st day of the month 2 = 2nd day of the month 3 = 3rd day of the month 4 = 4th day of the month 5 = 5th day of the month 6 = 6th day of the month 7 = 7th day of the month 8 = 8th day of the month 9 = 9th day of the month 10 = 10th day of the month 11 = 11th day of the month 12 = 12th day of the month 13 = 13th day of the month 14 = 14th day of the month 15 = 15th day of the month 16 = 16th day of the month 17 = 17th day of the month 18 = 18th day of the month 19 = 19th day of the month 20 = 20th day of the month 21 = 21st day of the month 22 = 22nd day of the month 23 = 23rd day of the month 24 = 24th day of the month 25 = 25th day of the month 26 = 26th day of the month 27 = 27th day of the month 28 = 28th day of the month 29 = 29th day of the month 30 = 30th day of the month (Use EOM for the 31st day of the month) EOM = The end-of-month. FRI = Friday FRN = The floating rate note convention or Eurodollar convention

DtAdjmt/BizCtr (Repeating)				
Business Centers	Ctr	String	A business center whose calendar is used to for date adjustment, e.g. GBLO . See http://www.fpml.org/coding-scheme/business-center for standard 4-character code values.	

9.1.2 Pricing Date and Time Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
Pxng				
Pricing Date Unadjusted	DtUnadj	LocalMktDate	Unadjusted pricing or fixing date, e.g. for commodity or FX forward trades.	
Pricing Date Adjusted	Dt	LocalMktDate	Adjusted pricing or fixing date, e.g. for commodity or FX forward trades.	

9.1.3 Complex Event Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
CmplxEvnt				
Complex Event Type	Typ	int	Identifies the type of complex event. Required if NoComplexEvents > 0.	1 = Capped 2 = Trigger 3 = Knock-in up 4 = Knock-in down 5 = Knock-out up 6 = Knock-out down 7 = Underlying 8 = Reset Barrier 9 = Rolling Barrier
Complex Option Payout Amount	OptPayAmt	Amt	Cash amount indicating the pay out associated with an event. For binary options this is a fixed amount.	
Complex Event Price	Px	Price	Specifies the price at which the complex event takes effect. Impact of the event price is determined by the ComplexEventType(1484).	

Complex Event Price Boundary Method	PxBndryMeth	int	Specifies the boundary condition to be used for the event price relative to the underlying price at the point the complex event outcome takes effect as determined by the ComplexEventPriceTimeType.	1 = Less than ComplexEventPrice(1486) 2 = Less than or equal to ComplexEventPrice(1486) 3 = Equal to ComplexEventPrice(1486) 4 = Greater than or equal to ComplexEventPrice(1486) 5 = Greater than ComplexEventPrice(1486)
Complex Event Price Boundary Precision	PxBndryPrcsn	Percentage	Used in combination with ComplexEventPriceBoundaryMethod to specify the percentage of the strike price in relation to the underlying price. The percentage is generally 100 or greater for puts and 100 or less for calls.	
Complex Event Price Time Type	PxTmTyp	int	Specifies when the complex event outcome takes effect. The outcome of a complex event is a payout or barrier action as specified by the ComplexEventType.	1 = Expiration 2 = Immediate (At Any Time) 3 = Specified Date/Time
Complex Event Condition	Cond	int	ComplexEventCondition is conditionally required when there are more than one ComplexEvent occurrences. A chain of ComplexEvents must be linked together through use of the ComplexEventCondition in which the relationship between any two events is described. For any two ComplexEvents the first occurrence will specify the ComplexEventCondition which links it with the second event.	1 = And 2 = Or
CmplxEvnt/EvntDts (Repeating)				
Complex Event Start Date	StartDt	UTCTimestamp	Required if NoComplexEventDates(1491) > 0.	
Complex Event End Date	EndDt	UTCTimestamp	Required if NoComplexEventDates(1491) > 0.	
CmplxEvnt/EvntDts/EvntTms (Repeating)				
Complex Event Start Time	StartTm	UTCTimeOnly	Required if NoComplexEventTimes(1494) > 0.	
Complex Event End Time	EndTm	UTCTimeOnly	Required if NoComplexEventTimes(1494) > 0.	

9.1.4 Options Exercise Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
OptExr				
OptExr/Dts				
Option Exercise Frequency Period	FreqPeriod	int	Time unit multiplier for the frequency of exercise dates. If present OptionExerciseFrequencyUnit(tbd) must be specified.	
OptionExerciseFrequencyUnit	FreqUnit	String	Time unit associated with the frequency of exercise dates. If present OptionExerciseFrequencyPeriod(tbd) must be specified.	D = Day H = Hour Min = Minute Mo = Month S = Second Wk = Week Yr = Year

9.1.5 Stream Effective Date Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
EfctvDt				
Unadjusted Effective Date	DtUnadj	LocalMktDate	Unadjusted effective date.	
Effective Date Relative To	Rel	Reserved100Plus	If the effective date is relative to an anchor date, this specifies the anchor date.	0 = Trade date 1 = Settlement date 2 = Effective date 3 = Calculation period start date 4 = Calculation period end date 5 = Reset date 6 = Last pricing date 7 = Valuation date 8 = Cash settlement date 9 = Option exercise start date
Effective Date Offset Period	Period	int	Relative effective date offset period	
Effective Date Offset Unit	Unit	String	Relative effective date offset unit	D = Day H = Hour Min = Minute Mo = Month S = Second Wk = Week Yr = Year

Effective Date Offset Day Type	Typ	int	Relative Effective Date Offset Day Type.	0 = Business 1 = Calendar 2 = Commodity business 3 = Currency business 4 = Exchange business 5 = Scheduled trading day
Adjusted Effective Date	Dt	LocalMktDate	Adjusted effective date.	

9.1.6 Stream Termination Date Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
TrmtnDt				
Unadjusted Termination Date	DtUnadj	LocalMktDate	Unadjusted Termination Date.	
Termination Date Relative To	Rel	Reserved100Plus	If the termination date is relative to an anchor date, this specifies the anchor date.	2 = Effective date
Termination Date Offset Period	Period	int	Relative termination date offset period.	
Termination Date Offset Unit	Unit	String	Relative termination date offset unit.	D = Day H = Hour Min = Minute Mo = Month S = Second Wk = Week Yr = Year
Termination Date Offset Day Type	Typ	int	Relative termination date offset day type.	0 = Business 1 = Calendar 2 = Commodity business 3 = Currency business 4 = Exchange business 5 = Scheduled trading day
Adjusted Termination Date	Dt	LocalMktDate	Adjusted Termination Date.	

9.1.7 Stream Calculation Period Date Component

StreamCalculationPeriodDates is a subcomponent of the StreamGrp component used to specify the calculation period dates of the Stream.

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
CalcDts				
Unadjusted First Period Start Date	FirstStartDtUnadj	LocalMktDate	Unadjusted first calculation period start date if before the effective date.	
Adjusted First Period Start Date	FirstStartDt	LocalMktDate	Adjusted first calculation period start date if before the effective date.	
Unadjusted First Regular Period Start Date	FirstReglrStartDtUnadj	LocalMktDate	Unadjusted first start date of the regular calculation period if there is an initial stub period.	
Unadjusted First Compounding Period End Date	FirstCmpndgEndDtUnadj	LocalMktDate	The end of the initial compounding period.	
Unadjusted Last Regular Period End Date	LastReglrEndDtUnadj	LocalMktDate	Unadjusted last regular period end date if there is a final stub period.	
Calculation Frequency Period	Period	int	The period of frequency at which calculation period end dates occur.	
Calculation Frequency Unit	Unit	String	The unit of frequency at which calculation period end dates occur.	D = Day H = Hour Min = Minute Mo = Month S = Second Wk = Week Yr = Year

9.1.8 Payment Stream Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
PmtStrm				
Payment Stream Type	Typ	int	Type of Payment Stream	0 = Periodic (the default) 1 = Initial 2 = Single
PmtStrm/PmtDts				

Payment Stream Payment Frequency Period	FreqPeriod	int	The period of frequency of payments.	
Payment Stream Payment Frequency Unit	FreqUnit	String	The unit of frequency of payments.	D = Day Mo = Month T = Term Wk = Week Yr = Year
Payment Stream Payment Date Relative To	Reltv	Reserved100Plus	If payment dates are relative to an anchor date, specifies the anchor date.	0 = Trade date 1 = Settlement date 2 = Effective date 3 = Calculation period start date 4 = Calculation period end date 5 = Reset date 6 = Last pricing date 7 = Valuation date 8 = Cash settlement date 9 = Option exercise start date
Payment Stream Payment Offset Period	OfstPeriod	int	Relative payment date offset period.	
Payment Stream Payment Offset Unit	OfstUnit	String	Time unit associated with the relative payment date offset.	D = Day H = Hour Min = Minute Mo = Month S = Second Wk = Week Yr = Year
Payment Stream Payment Offset Day Type	OfstTyp	int	The relative payment date offset day type.	0 = Business 1 = Calendar 2 = Commodity business 3 = Currency business 4 = Exchange business 5 = Scheduled trading day
PmtStrm/Fixed				
Rate	Rt	Percentage	Rate if the payment stream is a fixed rate stream.	
Fixed Amount	Amt	Amt	A fixed payment amount. In CDS an alternative to PaymentStreamRate(40784).	

Rate or Amount Currency	Ccy	Currency	Specifies the currency in which PaymentStreamFixedAmount(40785) or PaymentStreamRate(40784) is denomincated. Uses ISO 4271 currency codes.	
PmtStrm/Float				
Floating Rate Index	Ndx	String	Floating Rate Index.	
Floating Rate Index Source	NdxSrc	String	Floating Rate Index Source.	
Floating Rate Index Location	NdxLctn	String	Specifies the location of the floating rate index.	
Floating Rate Multiplier	RtMult	float	A rate multiplier to apply to the floating rate. A multiplier schedule is expressed as explicit multipliers and dates. In the case of a schedule, the step dates may be subject to adjustment in accordance with any adjustments specified in the calculationPeriodDatesAdjustments. The multiplier can be less than or greater than 1 (one). This element should only be included if the multiplier is not equal to 1 (one) for the term of the stream.	
Floating Rate Spread	Spread	PriceOffset	Spread from floating rate index.	
Averaging Method	AvgngMeth	int	When rate averaging is applicable, used to specify whether a weighted or unweighted average calculation method is to be used. The component must only be included when averaging applies.	0 = Unweighted 1 = Weighted

9.1.9 Fixed Rate of a Payment Stream Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
Fixed				
Rate	Rt	Percentage	Rate if the payment stream is a fixed rate stream.	
Fixed Amount	Amt	Amt	A fixed payment amount. In CDS an alternative to PaymentStreamRate(40784).	
Rate or Amount Currency	Ccy	Currency	Specifies the currency in which PaymentStreamFixedAmount(40785) or PaymentStreamRate(40784) is denomincated. Uses ISO 4271 currency codes.	

9.1.10 Floating Rate of a Payment Stream Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
Float				
Floating Rate Index	Ndx	String	Floating Rate Index.	
Floating Rate Index Source	NdxSrc	String	Floating Rate Index Source.	
Floating Rate Index Location	NdxLctn	String	Specifies the location of the floating rate index.	
Floating Rate Multiplier	RtMult	float	A rate multiplier to apply to the floating rate. A multiplier schedule is expressed as explicit multipliers and dates. In the case of a schedule, the step dates may be subject to adjustment in accordance with any adjustments specified in the calculationPeriodDatesAdjustments. The multiplier can be less than or greater than 1 (one). This element should only be included if the multiplier is not equal to 1 (one) for the term of the stream.	
Floating Rate Spread	Spread	PriceOffset	Spread from floating rate index.	
Averaging Method	AvgngMeth	int	When rate averaging is applicable, used to specify whether a weighted or unweighted average calculation method is to be used. The component must only be included when averaging applies.	0 = Unweighted 1 = Weighted

9.1.11 Delivery Stream Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
DlvryStrm				
Delivery Stream Type	Typ	int	Type of Delivery Stream.	0 = Periodic (the default) 1 = Initial 2 = Single
Pipeline	Ppln	String	The name of the oil delivery pipeline.	
Entry Point	EntryPnt	String	The point at which the commodity will enter the delivery mechanism or pipeline.	

Withdrawal Point	WthdrwlPnt	String	The point at which the commodity product will be withdrawn prior to delivery.	
Delivery Point	DlvryPnt	String	The point at which the commodity product will be delivered and received. Unconstrained string for most commodities. For bullion see http://www.fpml.org/coding-scheme/bullion-delivery-location	
Delivery Restriction	DlvryTyp	int	Specifies under what conditions the buyer and seller should be excused of their delivery obligations.	1 = Firm (never excused of delivery obligations) 2 = Interruptible or Non-firm (excused when interrupted for any reason or for no reason without liability) 3 = Force majeure (excused when prevented by force majeure). 4 = System firm (must be supplied from the owned or controlled generation or pre-existing purchased power assets of the system specified) 5 = Unit firm (must be supplied from the generation asset specified)
Delivery Contingency	Cntgncy	String	Specifies the electricity delivery contingency. See http://www.fpml.org/coding-scheme/electricity-transmission-contingency for values	
Delivery Contingent Party Side	CntgPty	String	The trade side value of the party responsible for electricity delivery contingency.	
Deliver At Source Indicator	DlvrAtSrc	Boolean	When this element is specified and set to 'Y' delivery of the coal product is to be at its source.	

Risk Apportionment	Risk	String	Specifies how the parties to the trade apportion responsibility for the delivery of the commodity product, e.g. Free On Board, Cost, Insurance, Freight.	
Title Transfer Location	TtlXfer	String	Title transfer location.	
Title Transfer Condition	TtlXferCond	int	Title transfer condition.	0 = Transfers with risk of loss 1 = Does not transfer with risk of loss
Importer Of Record	Imprtr	String	A party, not necessarily of the trade, who is the Importer of Record for the purposes of paying customs duties and applicable taxes or costs related to importation.	
Negative Tolerance	NegtvTlrnc	Qty	Specifies the negative quantity tolerance as an absolute quantity or percentage.	
Positive Tolerance	PostvTlrnc	Qty	Specifies the positive quantity tolerance as an absolute quantity or percentage.	

Tolerance UnitOfMeasure	TlrncUOM	String	Tolerance quantity UOM.	AUD = Australian Dollars Alw = Allowances BDFT = Board feet BRL = Brazil Real Bbl = Barrels Bcf = Billion cubic feet Bu = Bushels CAD = Canadian Dollars CBM = Cubic Meters CER = Certified Emissions Reduction CHF = Swiss Franc CLP = Chilean Peso CNY = Chinese Renminbi COP = Colombian Pesos CRT = Climate Reserve Tonnes CZK = Czech Koruna Ccy = Amount of currency DEM = Deutsche Mark ESP = Spanish Peseta EUR = Euro EnvCrd = Environmental Credit EnvOfst = Environmental Offset FRF = French Franc GBP = British Pound GJ = Gigajoules GT = Gross Tons Also known as long tons or imperial tons, equal to 2240 lbs Gal = Gallons HUF = Hungarian Forint ILS = Israel Shekel IPNT = Index point ITL = Italian Lira JPY = Japanese Yen KRW = Korean Won L = Liters MMBtu = One Million BTU MMbbl = Million Barrels MW-M = Megawatt-Month (electrical capacity) MW-a = Megawatt-Year (electrical capacity) MW-d = Megawatt-Day (electrical capacity) MW-h = Megawatt-Hour (electrical capacity) MW-min = Megawatt-Minute (electrical capacity) MWh = Megawatt hours MXN = Mexican Peso

Tolerance Type	TlrncTyp	int	Tolerance quantity type.	0 = Absolute 1 = Percentage
Tolerance Option Side	TlrncOptSide	int	Indicates whether the tolerance is at the seller's or buyer's option.	1 = Buyer 2 = Seller
Total Positive Tolerance	TtlPostvTlrnc	Qty	The positive percent tolerance which applies to the total quantity delivered over all shipment periods.	
Total Negative Tolerance	TtlNegtvTlrnc	Qty	The negative percent tolerance which applies to the total quantity delivered over all shipment periods.	
Conversion Factor for Notional Quantity	CnvrsnFctr	float	If the Notional Quantity is specified in a unit that does not match the unit in which the Commodity Reference Price is quoted, the scaling or conversion factor used to convert the Commodity Reference Price unit into the Notional Quantity unit should be stated here. If there is no conversion, this element is not intended to be used.	
Transport Equipment	Eqpmt	String	The transportation equipment with which the commodity product will be delivered and received. E.g. Barge, Truck, Railcar.	
Electing Party Side	ElctngSide	int	A reference to the party able to choose whether the gas is delivered for a particular period e.g. a swing or interruptible contract.	1 = Buyer 2 = Seller
DlvryStrm/CmdtySrc (Repeating)				

Commodity Source	Src	String	The SCoTA coal cargo origin, mining region, mine(s), mining complex(es), loadout(s) or river dock(s) or other point(s) of origin that Seller and Buyer agree are acceptable origins for the Coal Product. For International Coal transactions, this is the Origin of the Coal Product. See values at URL: http://www.fpml.org/coding-scheme/commodity-coal-product-source.	
DlvryStrm/Cycle (Repeating)				
Cycle Desc	Desc	String	The delivery cycles during which the oil product will be transported in the pipeline. Unconstrained string.	

9.1.12 Settlement Period Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
SettlPrd				
Stream Commodity Settlement Country	Ctry	String	Commodity delivery country.	
Stream Commodity Settlement Time Zone	TZ	String	Commodity delivery timezone specified as prevailing rather than standard or daylight . E.g. CPT for Central (US) Prevailing Time.	
Stream Commodity Settlement Flow Type	FlowTyp	int	Commodity delivery flow type.	0 = All times 1 = On-peak 2 = Off-peak 3 = Base
Stream Commodity Settlement Holidays Processing Instruction	Holidays	int	Indicates whether holidays are included in the settlement periods. Required for electricity contracts.	0 = Do not include holidays 1 = Include holidays
SettlPrd/Day (Repeating)				

Stream Commodity Settlement Day	Day	int	Delivery day or day group.	1 = Monday 2 = Tuesday 3 = Wednesday 4 = Thursday 5 = Friday 6 = Saturday 7 = Sunday 8 = All weekdays 9 = All days 10 = All weekends
Stream Commodity Settlement Total Hours	TotHrs	int	Sum of the hours specified in StreamCommoditySettlementTimeGrp.	
SettlPrd/Day/Time (Repeating)				
Stream Commodity Settlement Start	Start	String	Two formats: Electricity - delivery start hour specified as the end of the included hour expressed as an integer, e.g. a start hour of 4 begins at 3:00am. 1-24 indicates midnight to midnight. Gas - delivery start time given in 24-hour time format, e.g. 13:30 for 1:30pm.	
Stream Commodity Settlement End	End	String	Two formats: Electricity - delivery end hour specified as the end of the included hour expressed as an integer, e.g. an end hour of 20 ends at at 8:00pm. 1-24 indicates midnight to midnight. Gas - delivery end time given in 24-hour format, e.g. 20:30 for 8:30pm.	

9.1.13 Instrument/Stream Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
TrdCaptRpt/Instrmt				
Product Symbol	Sym	String	Common, "human understood" representation of the security. SecurityID value can be specified if no symbol exists	
Product Code	ID	String	Used as the primary identifier for the traded instrument. For listed derivatives this is generally an exchange or CCP defined value. For CDS this is a value assigned by CME Clearing.	
Source of the Product Code	Src	String	Identifies the source of the SecurityID If it is not specified the deafult of Clearing is used.	4 = ISIN number H = Clearing House / Clearing Organization N = Markit RED entity CLIP P = Markit RED pair CLIP

Security Type	SecTyp	String	Indicates type of instrument or security being traded or defined. It is required on inbound trade submissions and is used as one of the identifiers of the instrument. This is required because the usage of CFI code is in the process of being deprecated..	CMDTYSWAP = Commodity Swap FUT = Future FWD = Forward MLEG = Multi Leg (Combo) OPT = Option SWAPTION = Swaption
Contract Period Code	MMY	MonthYear	Specifies the month and year of maturity. Applicable for standardized derivatives which are typically only referenced by month and year (e.g. S&P futures).	
Maturity Date	MatDt	LocalMktDate	Date of maturity or the Settlement date of the CDS contract.	
Asset Class	AssetClss	int	The broad asset category for assessing risk exposure.	1 = Interest rate 2 = Currency 3 = Credit 4 = Equity 5 = Commodity
Asset Sub Class	AssetSubClss	String	The subcategory description of the asset class.	Agricultural = Agricultural Basket = Basket (for multi-currency) Bullion = Bullion Commodity Index = Commodity Index CreditBasket = Credit Basket CreditIndex = Credit Index CrossCurrency = Cross Currency Energy = Energy Environmental = Environmental Freight = Freight IndexTranche = Index Tranche Metals = Metals SingleCurrency = Single Currency SingleName = Single Name TotalReturn = Total Return
Strike Price	StrkPx	Price	Used for derivatives, such as options and covered warrants	
Strike Currency	StrkCcy	Currency	Used for derivatives	
Strike Unit of Measure	StrkUOM	String	Used to express the UOM of the price if different from the contract.	AUD = Australian Dollars Alw = Allowances

				BDFT = Board feet BRL = Brazil Real Bbl = Barrels Bcf = Billion cubic feet Bu = Bushels CAD = Canadian Dollars CBM = Cubic Meters CER = Certified Emissions Reduction CHF = Swiss Franc CLP = Chilean Peso CNY = Chinese Renminbi COP = Colombian Pesos CRT = Climate Reserve Tonnes CZK = Czech Koruna Ccy = Amount of currency DEM = Deutsche Mark ESP = Spanish Peseta EUR = Euro FRF = French Franc GBP = British Pound GJ = Gigajoules Gal = Gallons HUF = Hungarian Forint ILS = Israel Shekel IPNT = Index point ITL = Italian Lira JPY = Japanese Yen KRW = Korean Won MMBtu = One Million BTU MMbbl = Million Barrels MWh = Megawatt hours MXN = Mexican Peso MYR = Malaysia Ringgits NOK = Norway Krone NZD = New Zealand Dollars PLN = Polish Zloty PRINC = Principal with relation to debt instrument

				RCER = Relevant Certified Emission Reduction RUB = Russian Ruble SEK = Swedish Kroner TRY = Turkish Lira USD = US Dollars ZAR = South African Rand cwt = Hundredweight (US) day = Days dt = Dry metric tons g = Grams lbs = pounds oz_tr = Troy Ounces t = Metric Tons (aka Tonne) tn = Tons (US)
Strike Index	StrkNdx	String	Specifies the index used to calculate the strike price.	
Strike Index Spread	StrkSpread	PriceOffset	Specifies the strike price offset from the named index.	
Price Multiplier	Mult	float	The value when multiplied to the Price will give you the $ value of a single Position.It is also known as the Price multiplier.	
Unit Of Measure	UOM	String	The Unit of measure of the Underlying based upon which the contract is based. It is also referred to as the trading unit. For example the Unit of Measure of Live Cattle is lbs.	AUD = Australian Dollars Alw = Allowances BDFT = Board feet BRL = Brazil Real Bbl = Barrels Bcf = Billion cubic feet Bu = Bushels CAD = Canadian Dollars CBM = Cubic Meters CER = Certified Emissions Reduction CHF = Swiss Franc CLP = Chilean Peso CNY = Chinese Renminbi COP = Colombian Pesos CRT = Climate Reserve Tonnes CZK = Czech Koruna Ccy = Amount of currency DEM = Deutsche

				Mark ESP = Spanish Peseta EUR = Euro FRF = French Franc GBP = British Pound GJ = Gigajoules Gal = Gallons HUF = Hungarian Forint ILS = Israel Shekel IPNT = Index point ITL = Italian Lira JPY = Japanese Yen KRW = Korean Won MMBtu = One Million BTU MMbbl = Million Barrels MWh = Megawatt hours MXN = Mexican Peso MYR = Malaysia Ringgits NOK = Norway Krone NZD = New Zealand Dollars PLN = Polish Zloty PRINC = Principal with relation to debt instrument RCER = Relevant Certified Emission Reduction RUB = Russian Ruble SEK = Swedish Kroner TRY = Turkish Lira USD = US Dollars ZAR = South African Rand cwt = Hundredweight (US) day = Days dt = Dry metric tons g = Grams lbs = pounds oz_tr = Troy Ounces t = Metric Tons (aka Tonne) tn = Tons (US)
Unit of Measure Currency	UOMCcy	Currency	Indicates the currency of the unit of measure. Conditionally required when UnitOfMeasure = Ccy	

Unit of Measure Quantity	UOMQty	Qty	Quantity of the Underlying Commodity on which the contract is based. It is also known as the trading measure. For example 1 contract of Live Cattle is equilavelent to 40000 lbs of Live cattle.	
Price Unit of Measure	PxUOM	String	The Unit of measure of the quoted Price. For example it is USD for a Eurodollar contract.	AUD = Australian Dollars Alw = Allowances BDFT = Board feet BRL = Brazil Real Bbl = Barrels Bcf = Billion cubic feet Bu = Bushels CAD = Canadian Dollars CBM = Cubic Meters CER = Certified Emissions Reduction CHF = Swiss Franc CLP = Chilean Peso CNY = Chinese Renminbi COP = Colombian Pesos CRT = Climate Reserve Tonnes CZK = Czech Koruna Ccy = Amount of currency DEM = Deutsche Mark ESP = Spanish Peseta EUR = Euro FRF = French Franc GBP = British Pound GJ = Gigajoules Gal = Gallons HUF = Hungarian Forint ILS = Israel Shekel IPNT = Index point ITL = Italian Lira JPY = Japanese Yen KRW = Korean Won MMBtu = One Million BTU MMbbl = Million Barrels MWh = Megawatt hours

				MXN = Mexican Peso MYR = Malaysia Ringgits NOK = Norway Krone NZD = New Zealand Dollars PLN = Polish Zloty PRINC = Principal with relation to debt instrument RCER = Relevant Certified Emission Reduction RUB = Russian Ruble SEK = Swedish Kroner TRY = Turkish Lira USD = US Dollars ZAR = South African Rand cwt = Hundredweight (US) day = Days dt = Dry metric tons g = Grams lbs = pounds oz_tr = Troy Ounces t = Metric Tons (aka Tonne) tn = Tons (US)
Price Unit of Measure Currency	PxUOMCcy	Currency	Indicates the currency of the price unit of measure. Conditionally required when PriceUnitOfMeasure = Ccy	
Units applicable for quoted price	PxUOMQty	Qty	Number of units of the underlying for which a quoted price is applicable. For example the price is quoted per 100 lbs of cattle.	
Exercise Style	ExerStyle	int	Type of exercise of a derivatives security	0 = European 1 = American 2 = Bermuda
Put Or Call	PutCall	int	Used to express option right	0 = Put 1 = Call
Time Unit	TmUnit	String	Used to indicate a time unit for the contract (e.g., days, weeks, months, etc.)	D = Day H = Hour Min = Minute Mo = Month S = Second Wk = Week Yr = Year
Product Exchange	Exch	Exchange	The exchange where the Security is listed.	CBT CCE CEE

				CMD CME COMEX DME GEX NYMEX
Price Quote Currency	PxQteCcy	Currency	The currency at which the Price is quoted.	
Strategy Type	StrtTyp	String	Type of trade strategy.	BF = Butterfly CAP = Capped CISN = Callable inverse snowball CLLR = Collar CNDR = Condor FLRS = Floors OTHER = Other STD = Straddle STG = Strangle
TrdCaptRpt/Instrmt/AID (Repeating)				
Alternate Identifier	AltID	String	The value of the Alternate security identifier.	
Alternate Identifier Source	AltIDSrc	String	The source of the Alternate security identifier.	4 = ISIN number H = Clearing House / Clearing Organization N = Markit RED entity CLIP P = Markit RED pair CLIP
TrdCaptRpt/Instrmt/Scndry (Repeating)				
Asset Class	AssetClss	int	The broad asset category for assessing risk exposure for a multi-asset trade.	1 = Interest rate 2 = Currency 3 = Credit 4 = Equity 5 = Commodity
Secondary Asset Sub Class	AssetSubClss	String	An indication of the general description of the asset class.	Agricultural = Agricultural Basket = Basket (for multi-currency) Bullion = Bullion Commodity Index = Commodity Index CreditBasket = Credit Basket CreditIndex = Credit Index CrossCurrency = Cross Currency Energy = Energy Environmental = Environmental Freight = Freight IndexTranche = Index Tranche

				Metals = Metals SingleCurrency = Single Currency SingleName = Single Name TotalReturn = Total Return
TrdCaptRpt/Instrmt/Evnt (Repeating)				
Event Date Value	Dt	LocalMktDate	Represents the value or date associated with the Type of event.	
Event Date Type	EventTyp	int	Represents the type of event associated with the contract.Typically event types are dates like an effective date, last trade date for the contract.	5 = Activation 7 = Last Eligible Trade Date 8 = Swap / CDS Start Date 9 = Swap / CDS End Date 13 = First Delivery Date 23 = First Notice Date 24 = Last Notice Date
Instrmt/CmplxEvnt (Repeating)				
Instrmt/CmplxEvnt/EvntDts (Repeating)				
Instrmt/CmplxEvnt/EvntDts/EvntTms (Repeating)				
TrdCaptRpt/Instrmt/DtAdjmt				
Business Day Convention	BizDayCnvtn	int	The business day convention used for adjusting dates. The value defined here applies to all adjustable dates in the instrument unless specifically overridden.	0 = Not applicable 1 = None 2 = Following day 3 = Floating rate note 4 = Modified following day 5 = Preceding day 6 = Modified preceding day 7 = Nearest day
Date Roll Convention	Roll	String	The convention for determining a sequence of dates. It is used in conjunction with a specified frequency. The value defined here applies to all adjustable dates in the instrument unless specifically overridden.	1 = 1st day of the month 2 = 2nd day of the month 3 = 3rd day of the month 4 = 4th day of the month 5 = 5th day of the month 6 = 6th day of the month 7 = 7th day of the month 8 = 8th day of the month 9 = 9th day of the month

				10 = 10th day of the month 11 = 11th day of the month 12 = 12th day of the month 13 = 13th day of the month 14 = 14th day of the month 15 = 15th day of the month 16 = 16th day of the month 17 = 17th day of the month 18 = 18th day of the month 19 = 19th day of the month 20 = 20th day of the month 21 = 21st day of the month 22 = 22nd day of the month 23 = 23rd day of the month 24 = 24th day of the month 25 = 25th day of the month 26 = 26th day of the month 27 = 27th day of the month 28 = 28th day of the month 29 = 29th day of the month 30 = 30th day of the month (Use EOM for the 31st day of the month) EOM = The end-of-month. FRI = Friday FRN = The floating rate note convention or Eurodollar convention. IMM = The International Money Market settlement

				dates, i.e. the third Wednesday of the month. IMMAUD = The last trading day of the Sydney Futures Exchange 90 Day Bank Accepted Bills Futures contract. IMMCAD = The last trading day/expiration day of the Canadian Derivatives Exchange. IMMNZD = The last trading day of the Sydney Futures Exchange NZ 90 Day Bank Bill Futures contract. MON = Monday NONE = No adjustment. SAT = Saturday SFE = The Sydney Futures Exchange 90-Day Bank Accepted Bill Futures Settlement Dates. SUN = Sunday TBILL = The 13-week and 26-week U.S. Treasury Bill auction dates. THU = Thursday TUE = Tuesday WED = Wednesday
TrdCaptRpt/Instrmt/DtAdjmt/BizCtr (Repeating)				
Business Centers	Ctr	String	A business center whose calendar is used to for date adjustment, e.g. GBLO . See http://www.fpml.org/coding-scheme/business-center for standard 4-character code values.	
TrdCaptRpt/Instrmt/OptExr				
TrdCaptRpt/Instrmt/OptExr/Dts				
Option Exercise Frequency Period	FreqPeriod	int	Time unit multiplier for the frequency of exercise dates. If present OptionExerciseFrequencyUnit(tbd) must be specified.	
OptionExerciseFrequencyUnit	FreqUnit	String	Time unit associated with the frequency of exercise dates. If	D = Day H = Hour

			present OptionExerciseFrequencyPeriod(tbd) must be specified.	Min = Minute Mo = Month S = Second Wk = Week Yr = Year
TrdCaptRpt/Instrmt/Strm (Repeating)				
TrdCaptRpt/Instrmt/Strm/Cmdty				
TrdCaptRpt/Instrmt/Strm/Cmdty/AssetAttrib (Repeating)				
TrdCaptRpt/Instrmt/Strm/Cmdty/SettlPrd (Repeating)				
TrdCaptRpt/Instrmt/Strm/Cmdty/SettlPrd/Day (Repeating)				
TrdCaptRpt/Instrmt/Strm/Cmdty/SettlPrd/Day/Time (Repeating)				
TrdCaptRpt/Instrmt/Strm/EfctvDt				
TrdCaptRpt/Instrmt/Strm/TrmtnDt				
TrdCaptRpt/Instrmt/Strm/CalcDts				
TrdCaptRpt/Instrmt/Strm/PmtStrm				
TrdCaptRpt/Instrmt/Strm/PmtStrm/PmtDts				
TrdCaptRpt/Instrmt/Strm/PmtStrm/Fixed				
TrdCaptRpt/Instrmt/Strm/PmtStrm/Float				
TrdCaptRpt/Instrmt/Strm/DlvryStrm				
TrdCaptRpt/Instrmt/Strm/DlvryStrm/CmdtySrc (Repeating)				
TrdCaptRpt/Instrmt/PhysSettlTrm (Repeating)				
TrdCaptRpt/Instrmt/PhysSettlTrm/DlvrblOblig (Repeating)				

9.1.14 Underlying Instrument/Stream Component

Field Name	FIXML Attribute Name	Data Type	Description	Supported Enums
TrdCaptpt/Undly				
Underlying Product Code	ID	String	Used as the primary identifier for the underlying instrument.	
Underlying Product Code Source	Src	String	Identifies the source responsible for assigning the security identifier of the underling security. This may be the exchange, CCP, or an international organization.	4 = ISIN number H = Clearing House / Clearing Organization N = Markit RED entity CLIP P = Markit RED pair CLIP
Underlying Security Type	SecTyp	String	Used to indicate the type of underlying security being reported; Future, Option on Physical, Option on Future, or Multi-leg for spreads.	CMDTYSWAP = Commodity Swap FUT = Future FWD = Forward
Underlying Maturity	MMY	MonthYear	The expiration period code of an underlying instrument. Used in combination with UnderlyingSymbol or UnderlyingSecurityID to specify the instrument identifier. The value can be expressed as YYYYMM, YYYYMMDD or YYYYMMwN where w represents a reference to week	

Underlying Product Exchange	Exch	Exchange	The exchange on which the underlying security is listed and has traded	CBT CCE CEE CMD CME COMEX DME GEX NYMEX
Underlying Security Long Name	Desc	String	Description of the Underlying security. See SecurityDesc(107).	
Underlying Put or Call	PutCall	int	Specifies the option right of the underlying instrument. A call option gives the option holder the right to buy the underlying at the strike price. A put option gives the holder the right to sell the underlying at the strike price	0 = Put 1 = Call
Underlying Asset Class	AssetClss	int	The broad asset category for assessing risk exposure.	1 = Interest rate 2 = Currency 3 = Credit 4 = Equity 5 = Commodity
Underlying Asset Sub Class	AssetSubClss	String	An indication of the general description of the asset class.	Agricultural = Agricultural Basket = Basket (for multi-currency) Bullion = Bullion Commodity Index = Commodity Index CreditBasket = Credit Basket CreditIndex = Credit Index CrossCurrency = Cross Currency Energy = Energy Environmental = Environmental Freight = Freight IndexTranche = Index Tranche Metals = Metals SingleCurrency = Single Currency SingleName = Single Name TotalReturn = Total Return

Underlying Price Quote Currency	PxQteCcy	String	Default currency in which the price is quoted. Defined at the instrument level. Used in place of Currency (tag 15) to express the currency of a product when the former is implemented as the FX dealt currency	EN EN1
Undly/UndAID (Repeating)				
Underlying Security Alternate ID	AltID	String	Alternate Security identifier value for this underlying security of UnderlyingSecurityAltIDSource (459) type (e.g. CUSIP, SEDOL, ISIN, etc). Requires UnderlyingSecurityAltIDSource.	
Underlying Security Alternate ID Source	AltIDSrc	String	Identifies Type or Source of the the Alternate ID or Alias for the Underlying Instrument	4 = ISIN number 100 = TCC Alias 101 = ITC Alias 102 = IXM Number 103 = Globex Alias 104 = Red Code 105 = Reference Obligation 106 = Pair Clip 107 = PRS Commodity Code Alias 108 = PRS Put Commodity Code Alias 109 = PRS Call Commodity Code Alias 110 = TAS Commodity Code Alias 111 = Red Index Ticker H = Clearing House / Clearing Organization N = Markit RED entity CLIP P = Markit RED pair CLIP
Undly/Scndry (Repeating)				
Underlying Secondary Asset Class	AssetClss	int	The broad asset category for assessing risk exposure for a multi-asset trade.	1 = Interest rate 2 = Currency 3 = Credit 4 = Equity 5 = Commodity

Underlying Secondary Asset Sub Class	AssetSubClss	String	An indication of the general description of the asset class.	Agricultural = Agricultural Basket = Basket (for multi-currency) Bullion = Bullion Commodity Index = Commodity Index CreditBasket = Credit Basket CreditIndex = Credit Index CrossCurrency = Cross Currency Energy = Energy Environmental = Environmental Freight = Freight IndexTranche = Index Tranche Metals = Metals SingleCurrency = Single Currency SingleName = Single Name TotalReturn = Total Return
Undly/Strm (Repeating)				
Undly/Strm/Cmdty				
Undly/Strm/Cmdty/AssetAttrib (Repeating)				
Undly/Strm/Cmdty/SettlPrd (Repeating)				
Undly/Strm/Cmdty/SettlPrd/Day (Repeating)				
Undly/Strm/Cmdty/SettlPrd/Day/Time (Repeating)				
Undly/Strm/EfctvDt				
Undly/Strm/TrmtnDt				
Undly/Strm/CalcDts				
Undly/Strm/PmtStrm				
Undly/Strm/PmtStrm/PmtDts				
Undly/Strm/PmtStrm/Fixed				
Undly/Strm/PmtStrm/Float				
Undly/Strm/DlvryStrm				
Undly/Strm/DlvryStrm/CmdtySrc (Repeating)				
Undly/Strm/DlvryStrm/Cycle (Repeating)				
Undly/PhysSettlTrm (Repeating)				
Undly/PhysSettlTrm/DlvrblOblig (Repeating)				

9.2 Message Definitions used in FIXML Messages

9.2.1 User Request Message Specification

This message is sent by the submitter while establishing a session using HTTP as a transport. The message is used to login, logoff or change a password.

Field Name	FIXML Attribute Name	Data Type	Description	Required for Transaction Type	Supported Values
UserReq					
User Request ID	UserReqID	String	Unique identifier for a User Request.	ALL	
User Request Type	UserReqTyp	int	Indicates the action required by a User Request Message	ALL	1 = Log On User 2 = Log Off User 3 = Change Password For User
Username	Username	String	Username (login ID) assigned by CME's Market Operations Technical Support.	ALL	
Password	Password	String	Password assigned by CME's Market Operations Technical Support.	Login Password Change	
New Password	NewPassword	String	New Password. Used when changing the Password.	Password Change	

9.2.2 User Response Message Specification

This message is sent by CME RS in response to a UserRequest message. This communicates the status of the User Request.

Field Name	FIXML Attribute Name	Data Type	Description	Present for Transaction Type	Supported Values
UserRsp					
User Request ID	UserReqID	String	Request ID associated with the User Request leading to this Response message.	ALL	
Username	Username	String	Username (login ID) assigned by CME's Market Operations Technical Support.	ALL	

Field Name	FIXML Attribute Name	Data Type	Description	Present for Transaction Type	Supported Values
User Status	UserStat	Int	Indicates the status of a user	ALL	1 = Logged In 2 = Not Logged In 3 = User Not Recognized 4 = Password Incorrect 5 = Password Changed 6 = Other
User Status Text	UserStatText	String	Reason a request was not carried out		

10 Message Samples

10.1 Creation Data Message Samples

10.1.1 PET Report for a Fixed-Float Cash Settled Swap – Power

This is a sample Part 45 (PET Report) report for for a Fixed Float Swap.

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt TransTyp="0" RptTyp="0" RptID="4FC77E9A1464008D" TxnTm="2012-09-
07T15:31:12.000+00:00" TrdDt="2012-09-07" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S"
RegRptTyp="1" TrdCollztn="3" ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-09-07T15:31:12.000+00:00"/>
    <RegTrdID Src="1030282338" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/> <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
  <Instrmt SecTyp="CMDTYSWAP" AssetClss="5" AssetSubClss="15" SettlMeth="C">
     <Strm Typ="0" PaySide="2" RcvSide="1" Notl="25.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H"
       TotNotl="122800.00" TotNotlUOM="MWh" Ccy="USD">
       <Cmdty Base="Electricity"
         Desc="6x16, Monday-Saturday Hours Ending 07:00-22:00 (PPT), Excluding NERC Holidays">
         <!-- Holidays="0" means Do Not Include -->
         <SettlPrd TZ="PPT" FlowTyp="1" Holidays="0">
           <Day Day="8" TotHrs="16">
             <Time Start="7" End="22"/>
           </Day>
           <Day Day="6" TotHrs="16">
             <Time Start="7" End="22"/>
           </Day>
             </SettlPrd>
       </Cmdty>
       <EfctvDt Dt="2014-01-01"/>
       <TrmtnDt Dt="2014-12-31"/>
       <PmtStrm Typ="0">
             <PmtDts FreqPeriod="3" FreqUnit="Mo"/>
         <Float Ndx="ICE's Power Day-Ahead Index"
           NdxLctn="Palo Verde"/>
       </PmtStrm>
     </Strm>
     <Strm Typ="0" PaySide="1" RcvSide="2" Notl="25.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H"
       TotNotl="122800.00" TotNotlUOM="MWh" Ccy="USD">
       <Cmdty Base="Electricity"
         Desc="6x16, Monday-Saturday Hours Ending 07:00-22:00 (PPT), Excluding NERC Holidays">
         <!-- Holidays="0" means Do Not Include -->
         <SettlPrd TZ="PPT" FlowTyp="1" Holidays="0">
           <Day Day="8" TotHrs="16">
             <Time Start="7" End="22"/>
           </Day>
           <Day Day="6" TotHrs="16">
```

```
            <Time Start="7" End="22"/>
          </Day>
            </SettlPrd>
      </Cmdty>
      <EfctvDt Dt="2014-01-01"/>
      <TrmtnDt Dt="2014-12-31"/>
      <PmtStrm Typ="0">
            <PmtDts FreqPeriod="3" FreqUnit="Mo"/>
        <Fixed Rt="40.00" Ccy="USD"/>
      </PmtStrm>
    </Strm>
  </Instrmt>
  <TrdRegTS Typ="0" TS="2012-09-07T15:31:12.000-05:00"/>
  <RptSide Side="1">
    <Pty ID="ABCLEI" R="7" Src="N">
          <Sub Typ="46" ID="Y"/> <!-- Major Swap Participant -->
          <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
    </Pty>
  </RptSide>
  <RptSide Side="2">
    <Pty ID="XYZLEI" R="7" Src="N">
          <Sub Typ="45" ID="Y"/> <!-- Swap Dealer -->
          <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
          <Sub Typ="49" ID="Y"/> <!-- Reporting entity -->
    </Pty>
  </RptSide>
</TrdCaptRpt>
```

10.1.2 PET Report for a Basis Swap Cleared elsewhere – Natural Gas

This is a sample Part 45 (PET Report) report for Basis (Float/Float) Swap.

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt TrdDt="2012-09-19" TransTyp="0" RptTyp="0" RptID="4578437594875" TxnTm="2012-04-
20T13:33:00.000-05:00" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="1" TrdCollztn="0"
ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-04-20T13:33:00.000-05:00"/>
    <RegTrdID Src="1030282372" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/>
    <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
    <Pty ID="ICE" R="21" Src="C"/>
  <Instrmt SecTyp="CMDTYSWAP">
     <Strm Typ="0" PaySide="2" RcvSide="1" Notl="2500.00" NotlUOM="MMBtu" NotlPeriod="1"
NotlUnit="D"
       TotNotl="147500.00" TotNotlUOM="MMBtu">
       <Cmdty Base="Natural Gas"/>
       <EfctvDt Dt="2013-01-01"/>
       <TrmtnDt Dt="2013-02-28"/>
       <PmtStrm Typ="0">
```

```
          <Float Ndx="Platts Inside FERC Gas Market Report"
            NdxLctn="Texas Eastern Transmission Corp - M3 Zone"/>
        </PmtStrm>
      </Strm>
      <Strm Typ="0" PaySide="1" RcvSide="2"  Notl="2500.00" NotlUOM="MMBtu" NotlPeriod="1"
NotlUnit="D"
        TotNotl="147500.00" TotNotlUOM="MMBtu">
        <Cmdty Base="Natural Gas"/>
        <EfctvDt Dt="2013-01-01"/>
        <TrmtnDt Dt="2013-02-28"/>
        <PmtStrm Typ="0">
          <Float Ndx="NYMEX Last Day Settlement"
            NdxLctn="Henry Hub"
            Spread="0.927500"/>
        </PmtStrm>
      </Strm>
    </Instrmt>
    <TrdRegTS Typ="0" TS="2012-09-05T11:01:08.000-05:00"/>
    <RptSide Side="1">
      <Pty ID="ABCLEI" R="7" Src="N">
            <Sub Typ="46" ID="Y"/> <!-- Major Swap Participant -->
            <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
      </Pty>
    </RptSide>
    <RptSide Side="2">
      <Pty ID="XYZLEI" R="7" Src="N">
            <Sub Typ="45" ID="Y"/> <!-- Swap Dealer -->
            <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
            <Sub Typ="49" ID="Y"/> <!-- Reporting entity -->
      </Pty>
    </RptSide>
</TrdCaptRpt>
```

10.1.3 PET Report for a Commodity Forward – London Gold Forward

This is a sample Part 45 (PET Report) report for for a Commodity Forward Swap (London Gold Forward).

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt TransTyp="0" RptTyp="0" RptID="4578437594875" TxnTm="2012-04-20T13:33:00.000-
05:00" TrdDt="2012-04-20" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="1" TrdCollztn="0"
ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-04-20T13:33:00.000-05:00"/>
    <RegTrdID Src="1030282372" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/> <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
  <Instrmt SecTyp="FWD" AssetClss="5" AssetSubClss="14" SettlMeth="P">
    <Strm Typ="1" PaySide="2" RcvSide="1" Notl="400.00" NotlUOM="oz_tr">
      <Cmdty Base="Bullion" CmdtyTyp="Gold"/>
      <DlvryStrm DlvryPnt="London"/>
```

```
    </Strm>
    <Strm Typ="0" PaySide="1" RcvSide="2" Notl="400.00" NotlUOM="oz_tr" Ccy="USD">
      <Cmdty Base="Bullion" CmdtyTyp="Gold"/>
      <PmtStrm Typ="0">
                <Fixed Rt="1600.00" Ccy="USD"/>
      </PmtStrm>
    </Strm>
  </Instrmt>
  <TrdRegTS Typ="0" TS="2012-04-20T13:33:00.000-05:00"/>
  <RptSide Side="1">
    <Pty ID="ABCLEI" R="7" Src="N">
          <Sub Typ="46" ID="Y"/> <!-- Major Swap Participant -->
          <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
    </Pty>
  </RptSide>
  <RptSide Side="2">
    <Pty ID="XYZLEI" R="7" Src="N">
          <Sub Typ="45" ID="Y"/> <!-- Swap Dealer -->
          <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
          <Sub Typ="49" ID="Y"/> <!-- Reporting entity -->
    </Pty>
  </RptSide>
</TrdCaptRpt>
```

10.1.4 Reporting RT+PET of a Swaption - Power

This is a sample report that combines both Part 43 and Part 45 information into a single Report and reported to an SDR. This is a sample Swaptions trade with a Electricity Commodity Swap Underlying.

```
<?xml version="1.0" encoding="UTF-8"?>
<TrdCaptRpt TransTyp="0" RptTyp="0" RptID="4578437594875" TxnTm="2012-09-10T10:21:00.000-
05:00" TrdDt="2012-09-10" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="4" TrdCollztn="3"
ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-09-07T15:31:12.000+00:00"/>
    <RegTrdID Src="1030282339" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/>
    <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
    <Instrmt SecTyp="SWAPTION" StrkPx="55.00" StrkCcy="USD" StrkUOM="MWh" PutCall="1"
ExerStyle="1" MMY="20120930">
        <OptExr>
            <Dts FreqPeriod="1" FreqUnit="D"/>
        </OptExr>
    </Instrmt>
    <!-- Typ=10 Option Premium -->
    <Pmt Typ="10" PaySide="1" RcvSide="2" Px="0.35" PxTyp="2" Ccy="USD"/>
    <Undly SecTyp="CMDTYSWAP" AssetClss="5" AssetSubClss="15" SetMeth="C">
        <Strm Typ="0" PaySide="2" RcvSide="1" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">
```

```
            <Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT),
Excluding NERC Holidays">
                <SettlPrd TZ="EPT" FlowTyp="1" Holidays="0">
                    <Day Day="8" TotHrs="16">
                        <Time Start="8" End="23"/>
                    </Day>
                </SettlPrd>
            </Cmdty>
            <EfctvDt Dt="2012-09-12"/>
            <TrmtnDt Dt="2012-09-30"/>
            <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
                <Float Ndx="PJM's Daily Real-Time LMP" NdxLctn="Pennsylvania, New Jersey &amp;
Maryland - Western Hub"/>
            </PmtStrm>
        </Strm>
        <Strm Typ="0" PaySide="1" RcvSide="2" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">
            <Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT),
Excluding NERC Holidays">
                <SettlPrd TZ="EPT" FlowTyp="1" Holidays="0">
                    <Day Day="8" TotHrs="16">
                        <Time Start="8" End="23"/>
                    </Day>
                </SettlPrd>
            </Cmdty>
            <EfctvDt Dt="2012-09-12"/>
            <TrmtnDt Dt="2012-09-30"/>
            <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
                <Fixed Rt="55.00" Ccy="USD"/>
            </PmtStrm>
        </Strm>
    </Undly>
    <TrdRegTS Typ="0" TS="2012-09-10T10:21:00.000-05:00"/>
    <RptSide Side="1">
        <Pty ID="ABCLEI" R="7" Src="N">
            <!-- Financial Entity -->
            <Sub Typ="47" ID="Y"/>
            <!-- US Domicile -->
            <Sub Typ="48" ID="Y"/>
        </Pty>
    </RptSide>
    <RptSide Side="2">
        <Pty ID="XYZLEI" R="7" Src="N">
            <!-- Major Swap Participant -->
            <Sub Typ="46" ID="Y"/>
            <!-- US Domicile -->
            <Sub Typ="48" ID="Y"/>
            <!-- Reporting entity -->
            <Sub Typ="49" ID="Y"/>
```

```
        </Pty>
    </RptSide>
</TrdCaptRpt>
```

10.2 Continuation Data Message Samples

10.2.1 Reporting an Amendment (Increase) – Price Forming

This is a sample for reporting an Amendment which is Price forming. On receipt of this report CME RS will report RT.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Amendment, price-forming, e.g. increase of notional -->
<!-- Note TransTyp=2 (Replace), RegRptTyp=10 (Post-trade event + RT), TrdContntn=9 (Increase) -->
<TrdCaptRpt TransTyp="2" RptTyp="0" RptID="4578437594875" TxnTm="2012-09-05T14:33:00.000-
05:00" TrdDt="2012-09-05" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="10"
TrdCollztn="3" ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1" TrdContntn="9">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-09-05T14:33:00.000-05:00"/>
    <RegTrdID Src="1030282393" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/> <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
  <Instrmt SecTyp="CMDTYSWAP" AssetClss="5" AssetSubClss="15" SettlMeth="C">
     <Strm Typ="0" PaySide="2" RcvSide="1" Notl="2000000.00" NotlUOM="MMBtu" NotlPeriod="1"
NotlUnit="Mo"
        TotNotl="2000000.00" TotNotlUOM="MMBtu" Ccy="USD"> <!-- CHANGE: Increase of notional -->
        <Cmdty Base="Natural Gas"/>
        <EfctvDt Dt="2012-10-01"/>
        <TrmtnDt Dt="2012-10-31"/>
        <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
          <Float Ndx="NYMEX Last Day Settlement"
            NdxLctn="Henry Hub"/>
        </PmtStrm>
     </Strm>
     <Strm Typ="0" PaySide="1" RcvSide="2"  Notl="2000000.00" NotlUOM="MMBtu" NotlPeriod="1"
NotlUnit="Mo"
        TotNotl="2000000.00" TotNotlUOM="MMBtu" Ccy="USD">
        <Cmdty Base="Natural Gas"/>
        <EfctvDt Dt="2012-10-01"/>
        <TrmtnDt Dt="2012-10-31"/>
        <PmtStrm Typ="0">
                    <PmtDts FreqUnit="T"/>
                    <Fixed Rt="2.79" Ccy="USD"/>
        </PmtStrm>
     </Strm>
  </Instrmt>
  <TrdRegTS Typ="0" TS="2012-09-05T13:33:00.000-05:00"/>
  <RptSide Side="1">
     <Pty ID="ABCLEI" R="7" Src="N">
```

```
            <Sub Typ="46" ID="Y"/> <!-- Major Swap Participant -->
            <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
      </Pty>
    </RptSide>
    <RptSide Side="2">
      <Pty ID="XYZLEI" R="7" Src="N">
            <Sub Typ="45" ID="Y"/> <!-- Swap Dealer -->
            <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
            <Sub Typ="49" ID="Y"/> <!-- Reporting entity -->
      </Pty>
    </RptSide>
</TrdCaptRpt>
```

10.2.2 Reporting an Termination (Swap unwind)

This is a sample for reporting a Swap unwind which is Price forming. On receipt of this report CME RS will report RT.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Unwind -->
<!-- Note TransTyp=1 (Cancel), RegRptTyp=10 (Post-trade event + RT), TrdContntn=2 (Swap Unwind) -->
<TrdCaptRpt TransTyp="1" RptTyp="0" RptID="4578437594875" TxnTm="2012-09-05T14:33:00.000-
05:00" TrdDt="2012-09-05" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="10"
TrdCollztn="3" ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1" TrdContntn="2">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-09-05T14:33:00.000-05:00"/>
    <RegTrdID Src="1030282393" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/> <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
  <Instrmt SecTyp="CMDTYSWAP" AssetClss="5" AssetSubClss="15" SettlMeth="C">
     <Strm Typ="0" PaySide="2" RcvSide="1" Notl="1500000.00" NotlUOM="MMBtu" NotlPeriod="1"
NotlUnit="Mo"
       TotNotl="1500000.00" TotNotlUOM="MMBtu" Ccy="USD">
       <Cmdty Base="Natural Gas"/>
       <EfctvDt Dt="2012-10-01"/>
       <TrmtnDt Dt="2012-10-31"/>
       <PmtStrm Typ="0">
             <PmtDts FreqUnit="T"/>
         <Float Ndx="NYMEX Last Day Settlement"
           NdxLctn="Henry Hub"/>
       </PmtStrm>
     </Strm>
     <Strm Typ="0" PaySide="1" RcvSide="2"  Notl="1500000.00" NotlUOM="MMBtu" NotlPeriod="1"
NotlUnit="Mo"
       TotNotl="1500000.00" TotNotlUOM="MMBtu" Ccy="USD">
       <Cmdty Base="Natural Gas"/>
       <EfctvDt Dt="2012-10-01"/>
       <TrmtnDt Dt="2012-10-31"/>
       <PmtStrm Typ="0">
             <PmtDts FreqUnit="T"/>
```

```
                    <Fixed Rt="2.79" Ccy="USD"/>
            </PmtStrm>
        </Strm>
    </Instrmt>
    <TrdRegTS Typ="0" TS="2012-09-05T13:33:00.000-05:00"/>
    <RptSide Side="1">
        <Pty ID="ABCLEI" R="7" Src="N">
                <Sub Typ="46" ID="Y"/> <!-- Major Swap Participant -->
                <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
        </Pty>
    </RptSide>
    <RptSide Side="2">
        <Pty ID="XYZLEI" R="7" Src="N">
                <Sub Typ="45" ID="Y"/> <!-- Swap Dealer -->
                <Sub Typ="48" ID="Y"/> <!-- US Domicile -->
                <Sub Typ="49" ID="Y"/> <!-- Reporting entity -->
        </Pty>
    </RptSide>
</TrdCaptRpt>
```

10.2.3 Reporting an Option Exercise – Termination of the Option Trade

In this sample, the participant reports the termination of the Options trade as a result of an option exercise. This is part of Continuation data reporting.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Exercise - Cancel Swaption -->
<!-- Note TransTyp=1 (Cancel), RegRptTyp=10 (Post-trade event + RT), TrdContntn=4 (Exercise) -->
<TrdCaptRpt TransTyp="1" RptTyp="0" RptID="4578437594875" TxnTm="2012-09-10T11:21:00.000-
05:00" TrdDt="2012-09-10" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="10"
TrdCollztn="3" ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1" TrdContntn="4">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-09-10T11:21:00.000-05:00"/>
    <RegTrdID Src="1030282339" Typ="0" ID="EB5401476" Evnt="0"/>
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/>
    <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
    <Instrmt SecTyp="SWAPTION" StrkPx="55.00" StrkCcy="USD" StrkUOM="MWh" PutCall="1"
ExerStyle="1" MMY="20120930">
        <OptExr>
            <Dts FreqPeriod="1" FreqUnit="D"/>
        </OptExr>
    </Instrmt>
    <!-- Typ=10 Option Premium -->
    <Pmt Typ="10" PaySide="1" RcvSide="2" Px="0.35" PxTyp="2" Ccy="USD"/>
    <Undly SecTyp="CMDTYSWAP" AssetClss="5" AssetSubClss="15" SetMeth="C">
        <Strm Typ="0" PaySide="2" RcvSide="1" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">
            <Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT),
Excluding NERC Holidays">
```

```
                <SettlPrd TZ="EPT" FlowTyp="1" Holidays="0">
                    <Day Day="8" TotHrs="16">
                        <Time Start="8" End="23"/>
                    </Day>
                </SettlPrd>
            </Cmdty>
            <EfctvDt Dt="2012-09-12"/>
            <TrmtnDt Dt="2012-09-30"/>
            <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
                <Float Ndx="PJM's Daily Real-Time LMP" NdxLctn="Pennsylvania, New Jersey &amp;amp;
Maryland - Western Hub"/>
            </PmtStrm>
        </Strm>
        <Strm Typ="0" PaySide="1" RcvSide="2" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">
            <Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT),
Excluding NERC Holidays">
                <SettlPrd TZ="EPT" FlowTyp="1" Holidays="0">
                    <Day Day="8" TotHrs="16">
                        <Time Start="8" End="23"/>
                    </Day>
                </SettlPrd>
            </Cmdty>
            <EfctvDt Dt="2012-09-12"/>
            <TrmtnDt Dt="2012-09-30"/>
            <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
                <Fixed Rt="55.00" Ccy="USD"/>
            </PmtStrm>
        </Strm>
    </Undly>
    <TrdRegTS Typ="0" TS="2012-09-10T10:21:00.000-05:00"/>
    <RptSide Side="1">
        <Pty ID="ABCLEI" R="7" Src="N">
            <!-- Financial Entity -->
            <Sub Typ="47" ID="Y"/>
            <!-- US Domicile -->
            <Sub Typ="48" ID="Y"/>
        </Pty>
    </RptSide>
    <RptSide Side="2">
        <Pty ID="XYZLEI" R="7" Src="N">
            <!-- Major Swap Participant -->
            <Sub Typ="46" ID="Y"/>
            <!-- US Domicile -->
            <Sub Typ="48" ID="Y"/>
            <!-- Reporting entity -->
            <Sub Typ="49" ID="Y"/>
        </Pty>
    </RptSide>
```

```
</TrdCaptRpt>
```

10.2.4 Reporting an Option Exercise – Creation of the Swap Trade

In this sample, the participant reports the creation of the new Swap as a result of an an option exercise. This is part of Continuation data reporting.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Exercise - New Swap -->
<!-- Note TransTyp=0 (New), RegRptTyp=9 (Post-trade event), TrdContntn=4 (Exercise) -->
<TrdCaptRpt TransTyp="0" RptTyp="0" RptID="4578437594875" TxnTm="2012-09-10T11:21:00.000-
05:00" TrdDt="2012-09-10" Clrd="0" ClrIntn="0" TrdTyp="22" VenuTyp="S" RegRptTyp="9" TrdCollztn="3"
ClrReqmtExcptn="0" SettlCcy="USD" CnfmMeth="1" VerfMeth="1" TrdContntn="4">
    <Hdr SID="RCP" TID="CME" TSub="CMESDR" Snt="2012-09-10T11:21:00.000-05:00"/>
    <RegTrdID Src="1030282339" Typ="1" ID="EB5401476" Evnt="0"/> <!-- Prior USI of terminated
swaption trade -->
    <RegTrdID Src="1030282340" Typ="0" ID="EB5401476" Evnt="0"/> <!-- Current USI of new swap
trade. -->
    <Pty R="102" ID="LCZ7XYGSLJUHFXXNXD88" Src="N"/>
    <!-- CME SDR LEI -->
    <Pty R="73" ID="LEI of the SEF" Src="N"/>
    <Instrmt SecTyp="CMDTYSWAP" AssetClss="5" AssetSubClss="15" SettlMeth="C">
        <Strm Typ="0" PaySide="2" RcvSide="1" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">
            <Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT),
Excluding NERC Holidays">
                <SettlPrd TZ="EPT" FlowTyp="1" Holidays="0">
                    <Day Day="8" TotHrs="16">
                        <Time Start="8" End="23"/>
                    </Day>
                </SettlPrd>
            </Cmdty>
            <EfctvDt Dt="2012-09-12"/>
            <TrmtnDt Dt="2012-09-30"/>
            <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
                <Float Ndx="PJM's Daily Real-Time LMP" NdxLctn="Pennsylvania, New Jersey &amp;
Maryland - Western Hub"/>
            </PmtStrm>
        </Strm>
        <Strm Typ="0" PaySide="1" RcvSide="2" Notl="1000.00" NotlUOM="MWh" NotlPeriod="1"
NotlUnit="H" TotNotl="208000.00" TotNotlUOM="MWh">
            <Cmdty Base="Electricity" Desc="5x16, Monday-Friday Hours Ending 08:00-23:00 (EPT),
Excluding NERC Holidays">
                <SettlPrd TZ="EPT" FlowTyp="1" Holidays="0">
                    <Day Day="8" TotHrs="16">
                        <Time Start="8" End="23"/>
                    </Day>
                </SettlPrd>
            </Cmdty>
            <EfctvDt Dt="2012-09-12"/>
```

```
            <TrmtnDt Dt="2012-09-30"/>
            <PmtStrm Typ="0">
                <PmtDts FreqUnit="T"/>
                <Fixed Rt="55.00" Ccy="USD"/>
            </PmtStrm>
        </Strm>
    </Instrmt>
    <TrdRegTS Typ="0" TS="2012-09-10T10:21:00.000-05:00"/>
    <RptSide Side="1">
        <Pty ID="ABCLEI" R="7" Src="N">
            <!-- Financial Entity -->
            <Sub Typ="47" ID="Y"/>
            <!-- US Domicile -->
            <Sub Typ="48" ID="Y"/>
        </Pty>
    </RptSide>
    <RptSide Side="2">
        <Pty ID="XYZLEI" R="7" Src="N">
            <!-- Major Swap Participant -->
            <Sub Typ="46" ID="Y"/>
            <!-- US Domicile -->
            <Sub Typ="48" ID="Y"/>
            <!-- Reporting entity -->
            <Sub Typ="49" ID="Y"/>
        </Pty>
    </RptSide>
</TrdCaptRpt>
```

11 Revision History

Version	Date	Author	Description
1.0	02/08/2013	NSH	Initial version of document.