CME Clearing360 FIXML API
Trade Capture Report and Acknowledgement Components

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1.0 Introduction

This document contains information about all of the components of FIXML Trade messages, which are essentially XML elements. The FIXML Trade Capture Report and the Trade Capture Acknowledgement contain information that conveys routing information in the header element, the information about the product being traded in the Instrument block, and the trade related information in the ReportSide element. Other elements may also be required on Trade Submissions and Acknowledgements.

1.1 CME Clearing Contact Information

For more information please contact:
ccs@cmeigroup.com
2.0 Common Conventions and Definitions

This section includes common terms and definitions used in describing trade types and usage in FIXML messages.

2.1 Side

There are at least two sides to every trade. Normally, this term means either the "buy" side or the "sell" side. In cases where multi-leg instruments (spread transactions reported using a single message) are involved, the term “side” describes part of a whole trade, regardless of how many parties or legs are involved in the trade.

2.2 Leg

The term “leg” is always used in the context of spreads. A spread is a complex product (that is, a combination of products) which is made of simple products that are commonly referred to as legs. The leg is a complete product, and outside the context of a spread, is called an outright. You can trade a spread and either report it as a spread or report the trades as legs of a spread.

2.3 Timestamp Usage

All timestamps in FIXML messages must be represented in UTC format including complete date, hours, minutes and seconds:

YYYY-MM-DDTh:mm:ssTZD (eg 2007-11-29T13:00:01-05:00)

The "T" indicates the beginning of the time element, as specified in ISO 8601 where:

- YYYY = four-digit year
- MM = two-digit month (01=January, etc.)
- DD = two-digit day of month (01 through 31)
- hh = two digits of hour (00 through 23) (am/pm NOT allowed)
- mm = two digits of minute (00 through 59)
- ss = two digits of second (00 through 59)
- s = one or more digits representing a decimal fraction of a second
- TZD = time zone designator (Z or +hh:mm or -hh:mm)

Times are expressed in local time, together with a time zone offset in hours and minutes. A time zone offset of "+hh:mm" indicates that the date/time uses a local time zone which is "hh" hours and "mm" minutes ahead of UTC. A time zone offset of "-hh:mm" indicates that the date/time uses a local time zone which is "hh" hours and "mm" minutes behind UTC.

Examples:
A message from Paris (GMT) source will submit a trade with a TxnTm="2007-12-03T10:30:45+00:00". All timestamps should be in UTC format.

A message from Chicago (GMT) source will submit a trade with a TxnTm="2007-12-03T10:30:45-05:00". All timestamps should be in UTC format.
3.0 Components of FIXML Messages

Each FIXML message is comprised of a base element, and component elements, which are also known as ‘blocks’. The FIXML element contains attributes that describe the release and version of the FIXML message.

- **Version (v)** – The major FIX version including service pack.
- **Schema (s)** – The release date of the FIXML schema.
- **Extended Version (xv)** – The minor FIX version or the extended version. This is always defined in the context of a major version. Extension Packs are cumulative such that the specified EP value includes all prior extensions.
- **Extended Release (xr)** – The FIX extension release date.
- **Custom Application Version Id (cv)** – The custom extension is always within the context of the primary FIX version and the extended version based on bilateral agreement between parties.

**Example of FIXML element:**

```xml
<FIXML
  v="5.0"     //Version
  xv="EP44"   //Extended Version
  cv="NMX"    //Custom version
  s="20080914" //Schema Release Date
</FIXML>
```

3.1 Elements of FIXML API Messages

One of the key elements of the FIXML message is the Header (Hdr). The FIXML Header contains important routing information. In addition to the Header the FIXML element contains the message element. When FIXML messages are sent thru an API (in a request response model), the Header is a required element.
### 3.1.1 Header (StandardHeader, Hdr) Element

The header element is **required** on all FIXML API messages sent from or to a clearing system and contains the following attributes:

- **Snt (SendingTime)** – details the message transmission time, represented as a UTC time.
- **SID (SenderCompID)** - indicates the party submitting the transaction.
- **TID (TargetCompID)** - indicates the destination firm or exchange.
- **TSub (TargetSubID)** – qualifies the Target ID. In CME Group’s implementation, this attribute carries the exchange of the firm if the target Id is a firm.
- **SSub (SenderSubID)** - Qualifies the Sender ID. In CME Group’s implementation, this attribute carries the exchange of the firm if the Sender Id is a firm.

**Example of Header Block:**

```
<Hdr
  Snt="2007-05-21T16:26:10-05:00"   Message Sent Time
  SID="CME"  Message Sender ID
  SSub="CME"  Submitting Firm Exchange
  TID="123"  Destination Firm or Exchange
  TSub="CME">
   Destination Firm or Exchange
</Hdr>
```

### 3.2 Elements of FIXML Messages Used During Batch Transmissions

FIXML messages can be sent as batch files. The FIXML element supports this with the use of the Batch element.

#### 3.2.1 Batch Element

The batch element is optionally required during batch transmission of FIXML messages. This element is usually specified when there is more than one messages enclosed within a FIXML element.
Components of FIXML Messages

Example of Batch element within a FIXML Message

```xml
<FIXML v="5.0SP1" xv="EP44" cv="NMX" s="20080914"
    <Batch>
        <TrdCaptRpt/>
        <TrdCaptRpt/>
    </Batch>
</FIXML>
```

4.0 Trade Capture Reports

Each FIXML Trade Message is comprised of a base element, and component elements ("blocks"). The components of FIXML TradeCaptureReport Messages are:

- **Instrmt** (Instrument Block) – used to identify the traded instrument.
- **Undly** (Underlying Instrument Block) – used to further describe the traded instrument (when necessary).
- **Pty** (Party Block(s)) – used to identify entities and their roles.
- **RptSide** (Reporting Side Block(s)) – used to identify information pertaining to the buy or sell side(s) of the message.

Post-trade messages are always communicated from the point of view of the trading party, and not that of the clearing organization, regardless of the direction of the message flow.

Trade Capture Reports are used for various purposes including:

- Relaying confirmed trades to various parties not directly involved in the execution, such as trading firms, exchanges and other service providers. The direction of flow for these messages is *outbound* (from the marketplace).
- Relaying confirmed trade data to counterparties of the trade. These messages are *outbound* (from the marketplace).
- Reporting of privately negotiated trades, which are trades formed outside of the marketplace. These messages are *inbound* (to the marketplace) but may also be used for outbound messaging (when the marketplace relays them to counterparties).
- Reporting of trades executed on the floor or from an automated order routing mechanism. These messages flow *inbound* to the marketplace.
- Requesting a cancellation or amendment of a confirmed trade. These messages are *inbound* to the marketplace, but may also be used for outbound messaging (when the marketplace relays them to counterparties).

In Cleared Trade Reporting, the Trade Capture Report (TCR) process typically ends with a confirmed trade. The process is triggered by a request to register a new trade, replace a trade or cancel a trade.
4.1 Common Components of Trade Capture Reports and Trade Capture Report Acknowledgements

This section describes the Instrument Block, Underlying Block, and Parties Block.

4.1.1 Instrument (Instrument, Instrmt) Block

The Instrument Block identifies the product and contract included in the message. The Instrument Block is required on all Trade and Allocation messages. Depending on the type of message, the product information may occur in several places within a given message.

For example, if a spread transaction is reported in one message, the details of each leg of the spread are required to fully describe the trade. Also, for some products you must define a product’s underlying characteristics. At a minimum, the Instrument Block of a futures or options on futures contract should contain the following attributes and elements:

- ID (SecurityID) - The primary identifier for the traded instrument.
- SecTyp (SecurityType) – Future/Option/Forward/Swap.
- CFI (CFICode) – A value used to determine Future/Option/Call/Put.
- MMY (MaturityMonthYear) – The "Period Code" which is the contract year and month (day is included unless it is a contract that does not expire).
- Exch (SecurityExchange) – The Product Exchange where the product trades.
- StrkPx (StrikePrice) - The strike price for options.

**Outright Future Sample:**

```
<Instrmt
  ID = "ED"   ↷ Primary Identifier for the traded Instrument
  SecTyp="FUT" ↷ Product Type = Future
  CFI="XXXX"  ↷ (CFI to be eventually deprecated. May use SecTyp instead)
  Exch="CME" ↷ Product Exchange
  MMY="200806" ↷ Product Period Code
</Instrmt>
```

**Outright Option Sample:**

```
<Instrmt
  ID = "OOF"   ↷ Primary Identifier for the traded Instrument
  SecTyp="OOF" ↷ Product Type = Option on Future
  PutOrCall="1" ↷ Put or Call
  CFI="OCXXX"  ↷ (CFI to be eventually deprecated. May use SecTyp/Put or Call instead)
  Exch="CME" ↷ Product Exchange
  MMY="200806" ↷ Product Period Code
  StrkPx="97.75"/> ↷ Strike Price
</Instrmt>
```
4.1.2 Underlying Instrument (UnderlyingInstrument, Undly) Block

The Underlying Instrument block identifies the traded product, when the Instrument Block alone is not adequate. The Underlying Instrument Block is required on Trade and Allocation messages when standard maturity information is not enough information to identify the exact contract. For example, this information may be required for Flex Options and Combo products.

Depending on the type of message, the Underlying Instrument Block may occur in several places within a given message, in the same levels as the Instrument Block. At a minimum, the Underlying Instrument Block of a futures or options on futures contract should contain the following attributes:

- ID (UnderlyingSecurityID) – The Primary identifier for the Underlying Product.
- CFI (UnderlyingCFICode) – The CFI Code of the Underlying Product.
- MMY (UnderlyingMaturityMonthYear) – The Underlying Period Code.
- SecTyp (SecurityType) – Future/Option/Forward/Swap.
- Exch (SecurityExchange) – The Product Exchange where the product trades.

Underlying Block Example:

```
<Undly
   ID = “ED”  // Primary Identifier for the Underlying Instrument
   SecTyp=“FUT”  // Product Type of the Underlying = Future
   Exch=“CME”  // Product Exchange
   MMY=“200806”  // Product Period Code
</Undly>
```

4.1.3 Parties Block

The repeating Parties Block provides an efficient, standard way of expressing entity-related information in API Messages. Party Blocks are used in the FIXML schema at almost every level.

A Party Block consists of the following attributes:

- R (PartyRole) - A static number used to express the type of entity, such as Clearing Organization, Clearing Firm, or Account.
- ID (PartyID) - The value representing the entity itself, such as "CME", "995", or "MYACCT123."

A Party Block may also contain a single "Sub" element that contains the following attributes:

- Typ (PartySubIDType) - Expresses information that further defines the party, such as segregation (Origin) code.
- ID (PartySubID) – The value associated with the "Typ" above.

The diagram below illustrates a subset of Party Blocks used in the CME implementation of FIXML.
Party Block Example:

```
<Pty ID="CME" R="21"></Pty> ➔ Clearing Organization
<Pty ID="CME" R="22"></Pty> ➔ Exchange
<Pty ID="714" R="1"></Pty> ➔ Executing Firm
<Pty ID="FMTZUK08" R="24"></Pty> ➔ Customer Account
  <Sub ID="2" Typ="26"></Sub> ➔ Account Type (Customer/House)
</Pty>
<Pty ID="714" R="4"></Pty> ➔ Clearing Firm
<Pty ID="EC2CHGFX" R="43"></Pty> ➔ Internal Carry Account
```

**4.2 Trade Capture Report Element**

The following diagram illustrates the various elements used in the CME Group implementation of Trade Capture Reporting.

The Trade Capture Report Message element captures many of the key trade attributes, as described in the tables below. Attributes in the Trade Capture Report message include message characteristics and trade identifiers which, in combination with other attributes in the message, are crucial to processing the message.
### 4.2.1 Identifying Attributes

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RptID</td>
<td>Trade Report ID</td>
<td>Uniquely identifies the message being used to add, update, or cancel a trade. RptID is required on the Trade Capture Report and is to be unique per message. The TrdCaptRptAck (TradeCaptureReportAck) must echo back the RptID, and will not necessarily have a unique assigned Report ID.</td>
</tr>
<tr>
<td>TrdID</td>
<td>TradeID</td>
<td>The unique ID assigned to a trade once it enters the Clearing system. This will become the primary ID by which the clearing organization and firm refer to the trade entity.</td>
</tr>
<tr>
<td>TrdID2</td>
<td>SecondaryTradeID</td>
<td>Used to carry an internal clearing system assigned ID, which may or may not be reported to the firm.</td>
</tr>
<tr>
<td>FirmTrdID</td>
<td>FirmTradeID</td>
<td>The ID assigned to a trade by the Firm to track a trade within the Firm back office system. This ID can be assigned either prior to being submitted for Clearing or after being received from the clearing system, and may or may not be equal to the TradeID.</td>
</tr>
<tr>
<td>FirmTrdID2</td>
<td>SecondaryFirmTradeID</td>
<td>Used to carry an internal back office assigned ID which may or may not be reported to the clearing system.</td>
</tr>
</tbody>
</table>

### 4.2.2 Action Attributes

Action attributes help the system processing the message to identify the action that should be performed.

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TransTyp</td>
<td>TradeReportTransType</td>
<td>Identifies the main action to take resulting from the Trade Message and is required in a Trade message. The main action resulting from the Trade message can be Add (0), Cancel (1) or Replace (2). For the complete list of valid enumerations, refer to the Trade Capture</td>
</tr>
<tr>
<td>FIXML Abbreviation</td>
<td>FIXML Element Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>RptType</td>
<td>TradeReportType</td>
<td>Identifies the type of Trade Report message. RptType relating to the message. For a list of valid enumerations, refer to the Trade Capture Report Message document at <a href="http://www.cmegroup.com/clearing">http://www.cmegroup.com/clearing</a>.</td>
</tr>
<tr>
<td>TrdHandIInst</td>
<td>TradeHandlingInstr</td>
<td>Specifies how the Trade Capture Report should be handled by the Respondent. This is critical in determining the trading model and final confirm status of a given trade. For instance 0=Trade Confirm, 5=Two party report for Claim. For a list of valid enumerations, refer to the Trade Capture Report Message document at <a href="http://www.cmegroup.com/clearing">http://www.cmegroup.com/clearing</a>.</td>
</tr>
</tbody>
</table>

### 4.2.3 Price and Quantity (Market Data) Attributes

The price and quantity attributes specify the quantity (or notional amount) traded, and the price it was traded at in the message.

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
</table>
| LastPx             | LastPx            | For outright trades, the trade price is the price at which the contract was traded. The Trade Price can be either positive or negative. While sending a differential Spread (SLEDS) message, the trade price will contain the diff price. For spreads, the trade price can be derived as follows.  

\[
\text{Trade Price} = \sum \text{Leg Price} \times \text{Leg Ratio} \times (\text{side})
\]

Where Side = 1 if the leg is a Buy (regardless of Buy/Sell of Front Leg)  
Side = -1 if the leg is a Sell  

**Note:** This is true if the leg ratio and the price ratio are the same. |
<p>| LastQty            | LastQty           | Represents the number of contracts, or notional |</p>
<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>amount, traded for the product. For spreads reported in a multi-leg format, LastQty is the number of spreads traded for the defined Spread Ratio. For example: A Butterfly Spread Trade of 350 Long, 700 Short, and 350 Long contracts has a LastQty of 350.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PxTyp</td>
<td>PriceType</td>
<td>Used if the option trade price is at Cabinet. Cabinet trade prices can be &quot;Fixed&quot; or &quot;Variable,&quot; depending on option product specifications. Typically, CME Group option products may trade at fixed cabinet values, while CBOT option products may trade at variable cabinet values (whole dollar amounts up to, but not greater than, a standard option tick value).</td>
</tr>
</tbody>
</table>

### 4.2.4 Trade Characteristic Attributes

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TrdType</td>
<td>TrdType</td>
<td>Defines the type of trade on the message. For example the trade can be a regular trade (0), a block trade (1), etc. For the complete list of valid enumerations, refer to the Trade Capture Report Message document at <a href="http://www.cmegroup.com/clearing">http://www.cmegroup.com/clearing</a>.</td>
</tr>
<tr>
<td>TrdSubType</td>
<td>TrdSubType</td>
<td>A trade sub type is used to further qualify the trade type. For instance 7=Differential as opposed to 1=Offset due to allocation. For the complete list of valid enumerations, refer to the Trade Capture Report Message document at <a href="http://www.cmegroup.com/clearing">http://www.cmegroup.com/clearing</a>.</td>
</tr>
<tr>
<td>SetSesID</td>
<td>SettlSessID</td>
<td>Currently identifies the Trading Session, such as <strong>ETH</strong> (Electronic Trading Hours) and <strong>RTH</strong> (Regular Trading Hours). For example SetSesID=”RTH” or “ETH”.</td>
</tr>
<tr>
<td>SesSub</td>
<td>SetSubID</td>
<td>Represents the trading venue. It can be</td>
</tr>
<tr>
<td>FIXML Abbreviation</td>
<td>FIXML Element Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Electronic (E), Pit (P) or X-Pit (X).</td>
</tr>
<tr>
<td>MLegRptTyp</td>
<td>MultiLegReportingType</td>
<td>Required in the Trade message when reporting a spread trade, or part of a spread trade. If multi-legged trade data (all spreads are multi-legged) is being sent one leg at a time, the value is &quot;2&quot;. If the spread message is sent as a multi-legged instrument (like a SLEDS single-line trade), the value of the MLegRptTyp is &quot;3&quot;. <strong>Note:</strong> For APS Allocations, the MLegRptTyp of the original trades that made up the Allocation will be maintained. Therefore, even though only one contract period may be reported in an Allocation Report message, the MLegRptTyp could be a &quot;3&quot;. This value is determined and maintained for fee tracking purposes.</td>
</tr>
</tbody>
</table>

### 4.2.5 Message Source Attributes

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MsgEvtSrc</td>
<td>MessageEventSource</td>
<td>Identifies the event or source that gave rise to the message. This attribute will be set on outbound messages from the clearing system.</td>
</tr>
<tr>
<td>InptSrc</td>
<td>TradeInputSource</td>
<td>Identifies the original point of entry of the message, or type of system where the trade originated.</td>
</tr>
<tr>
<td>InptDev</td>
<td>TradeInputDevice</td>
<td>Identifies the method for getting the message into the system: message-based (&quot;API&quot;) or user-entered in Front End Clearing (&quot;UI&quot;).</td>
</tr>
</tbody>
</table>

### 4.2.6 Date and Time Attributes

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TrdDt</td>
<td>TradeDate</td>
<td>The date on which the trade occurred. This attribute is required on all inbound trade</td>
</tr>
<tr>
<td>FIXML Abbreviation</td>
<td>FIXML Element Name</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>messages.</td>
</tr>
<tr>
<td>OrigTrdDt</td>
<td>OriginalTradeDate</td>
<td>The date on which the CDS trade date occurred and is present if it is earlier than the trade date.</td>
</tr>
<tr>
<td>BizDt</td>
<td>ClearingBusinessDate</td>
<td>The date on which the trade is to be cleared, or processed in the clearing system.</td>
</tr>
<tr>
<td>TxnTm</td>
<td>TransactTime</td>
<td>The time of creation of the trade transaction. For a New trade being reported, this is also the Report Time. The time is represented in the UTC format on FIXML messages.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Execution Time</td>
</tr>
</tbody>
</table>

**Trade Capture Report Example:**
The following is an example of a Trade Capture Report Element while submitting a Block Trade:

```xml
<TrdCaptRpt     RptID="112CF229A04PRWEB03C9E23A " 
                 TrdID="12768"  
                 ExecID="0000000000000158070"  
                 TransTyp="0" 
                 RptTyp="0" 
                 TrdHandlInst ="5" 
                 TrdTyp="1" 
                 MLegRptTyp="1" 
                 TxnTm="2007-05-29T19:04:30-05:00" 
                 TrdDt="2007-05-29" 
                 OrigTrdDt="2007-05-27" 
                 BizDt="2007-05-29" 
                 LastQty="1" 
                 InptSrc="GBX" 
                 LastPx="111.23"  
                    >
```

 Trade Message Components
4.3 **Trade Instrument Leg Group Element (TrdInstrmntLegGrp, TrdLeg)**

This element is required when submitting multi-legged spread trades. It contains market data information such as quantity and price of the individual leg. The following example displays the submission of a Spread Trade with its Legs in a Trade Capture Report.

```
<TrdLeg
   Qty="4"
   RefID="500010"
   LastPx="3.21"
   RptID="114139098B3PRWEB02C90E32">
   <Leg
      ID="C"
      MMY="200709"
      SecTyp=\"FUT\"
      Side="2">→
   </Leg>
</TrdLeg>

<TrdLeg
   Qty="4"
   RefID="500012"
   LastPx="3.365"
   RptID="114139098B3PRWEB02C90E34">
   <Leg
      ID="C"
      MMY="200712"
      SecTyp=\"FUT\"
      Side="1">→
   </Leg>
</TrdLeg>
```

4.4 **Instrument Leg Element (InstrumentLeg, Leg)**

The Leg (InstrumentLeg) component block, like the Instrmt (Instrument) component block, contains all of the fields commonly used to describe a security or instrument. It describes a security to the contract period code level in multi-leg messages.

Several multi-leg-oriented messages specify an Instrument Leg component block. An instrument can have zero or more instrument legs. The fundamental business rule that applies to multi-leg instruments is that multi-leg instruments are defined as a products consisting of a combination of instrument legs. A multi-leg instrument must be able to trade automatically, that is, all instrument legs are traded or none are traded.
4.5  **Report Side Element (TrdCapRptSideGrp, RptSide)**

This block contains information pertaining to the side. This is a required element in all Trade Capture Report messages.

4.5.1  **Key Attributes of the Side Element**

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side</td>
<td>ReportSide</td>
<td>Indicates the side (buy/sell) of the Trade.</td>
</tr>
<tr>
<td>SesID</td>
<td>SessionID</td>
<td>Indicates the trading session for the trade (such as RTH = Regular Trading Hours).</td>
</tr>
<tr>
<td>SesSub</td>
<td>SessionSubID</td>
<td>An extension of the Session ID, used to further qualify it (such as X = Ex-Pit).</td>
</tr>
<tr>
<td>CustCpcty</td>
<td>CustomerCapacity</td>
<td>The CTI code for this side of the trade. This pertains to all legs of the side.</td>
</tr>
</tbody>
</table>
4.5.2 Message Source Attributes

<table>
<thead>
<tr>
<th>FIXML Abbreviation</th>
<th>FIXML Element Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>InptSrc</td>
<td>InputSource</td>
<td>Indicates the original source of the message. This value is persisted on Trade Capture Reports, regardless of the creator of the message.</td>
</tr>
<tr>
<td>InptDev</td>
<td>InputDevice</td>
<td>Indicates whether the message was the result of an action made through a user interface (UI) or messaging interface (API).</td>
</tr>
</tbody>
</table>

4.5.3 Parties Involved in the Trade

Submitting new trade data or changing an existing trade requires certain entity, or party information, for processing. This party information is sent on the Report Side element. The required party roles are executing firm, Exchange, Clearing Organization and Account Number.

```
<RptSide R="1" ..........>
  <Pty ID="CME" R="21"/> ➔ Clearing Organization
  <Pty ID="CME" R="22"/> ➔ Exchange
  <Pty ID="005" R="1"/> ➔ Executing Firm
  <Pty ID="2PCTEST4" R="24"> ➔ Customer Account
    <Sub ID="1" Typ="26"/> ➔ Account Type (Customer Origin)
  </Pty>
  <Pty ID="NKO" R="12"/> ➔ Executing Trader
  <Pty ID="001" R="17"/> ➔ Opposite Clearing Firm
  <Pty ID="125" R="4"/> ➔ Clearing Firm
  <Pty ID="001" R="38"/> ➔ Position Account
    <Sub ID="1" Typ="26"/>
  </Pty>
  <TrdRegTS TS="2006-06-19T18:00:00-05:00" Typ="1"/>
</RptSide>
```

4.5.4 Submitting the Origin Information in the Message

The origin can be submitted as a Sub Block of the Parties Block containing the Executing firm or Customer account, as shown above.

4.5.5 Submitting Origin for a Customer Account

The following example displays the origin submitted for a customer account:

```
<Pty ID="2PCTEST4" R="24"> ➔ Customer Account
  <Sub ID="1" Typ="26"/> ➔ Account Type (Customer Origin)
</Pty>
```
4.6 **Trade Regulatory Timestamp Block (TradeRegTS, TrdRegTS)**

For electronic trades, the execution time may be taken from the TrdRegTS Typ="1" block, if it is present.

### 4.6.1 Execution Time

The execution time is always specified in the regulatory block for all trades. For a Matched trade from the engine, this is the time the trade was matched. For a privately negotiated trade, this is time when the deal was consummated.

The other timestamps in the TrdRegTS component block are used to communicate various timestamps for an order or trade, as required by regulatory agencies. These timestamps are typically used to identify the exact times when orders are received on a trading floor, executed by a broker, etc. This block is always included while reporting a trade. The timestamps sent in the regulatory block are preserved by Clearing.

### 4.6.2 Sample TrdRegTS Block

The following example displays the TrdRegTS block:

```
<TrdRegTS TS="2007-05-29T13:11:45-05:00" Typ="1" Src="E"/> ← Execution Time
<TrdRegTS TS="2007-05-29T13:11:45-05:00" Typ="2" Src="E"/> ← Time In
```
### 4.7 TradeCaptureReportAck Element

The following diagram illustrates the various elements used in the Trade Capture Report Acknowledgement.

[Diagram showing the structure of the TradeCaptureReportAck element with attributes such as Hdr, Pty, Instrmt, Yld, Undly, TrdLeg, TrdRegTS, Amt, and RptSide.]
## 5.0 Appendix A - FIXML Attribute Enumerations by Trade Types

<table>
<thead>
<tr>
<th>Message Type Submitted</th>
<th>TrdTyp</th>
<th>TrdSubTyp</th>
<th>MLegRptTyp</th>
<th>SesSub</th>
<th>Equivalent TREX Transaction Type</th>
<th>Equivalent TREX Order Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT Outright Trade</td>
<td>0 = Regular</td>
<td>1</td>
<td>P</td>
<td>Blank or 1</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>PIT SLEDS Trade</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>P</td>
<td>D</td>
<td>Q</td>
</tr>
<tr>
<td>PIT Spread Leg</td>
<td>0</td>
<td>2</td>
<td>P</td>
<td>6, L</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Electronic Outright Trade</td>
<td>0</td>
<td>1</td>
<td>P</td>
<td>2</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Electronic SLEDS Trade</td>
<td>0</td>
<td>7</td>
<td>3</td>
<td>E</td>
<td>D</td>
<td>Q</td>
</tr>
<tr>
<td>Electronic Spread Leg</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>E</td>
<td>5</td>
<td>Q</td>
</tr>
<tr>
<td>Block Trade</td>
<td>1</td>
<td>1</td>
<td>X</td>
<td>B</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Block Spread Leg</td>
<td>1</td>
<td>7</td>
<td>2</td>
<td>X</td>
<td>B</td>
<td>Q</td>
</tr>
<tr>
<td>Block SLEDS Trade</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>X</td>
<td>B</td>
<td>Q</td>
</tr>
<tr>
<td>EFR Trade</td>
<td>11</td>
<td>1</td>
<td>X</td>
<td>R</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>EFS Trade</td>
<td>12</td>
<td>1</td>
<td>X</td>
<td>S</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>EFP Trade</td>
<td>2</td>
<td>1</td>
<td>X</td>
<td>9</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Generic Privately Negotiated Trade (PNTN)</td>
<td>22</td>
<td>1</td>
<td>X</td>
<td>O</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Generic Privately Negotiated Trade Spread Leg</td>
<td>22</td>
<td>2</td>
<td>X</td>
<td>O</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Message Type Submitted</td>
<td>TrdTyp</td>
<td>TrdSubTyp</td>
<td>MLegRptTyp</td>
<td>SesSub</td>
<td>Equivalent TREX Transaction Type</td>
<td>Equivalent TREX Order Type</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>-------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Generic Privately Negotiated Trade SLEDS</td>
<td>22</td>
<td>3</td>
<td>X</td>
<td>O</td>
<td>Q</td>
<td></td>
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<tr>
<td>Transfer Trade</td>
<td>3</td>
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<td>X</td>
<td>8</td>
<td>Q</td>
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</tr>
<tr>
<td>Pit Legged Spread</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>P</td>
<td>L</td>
<td>Q</td>
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<tr>
<td>Pit AON Trade</td>
<td>16</td>
<td>1</td>
<td>P</td>
<td>Blank or 1</td>
<td>U</td>
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</tr>
<tr>
<td>SUB Outright Trade</td>
<td>23</td>
<td>1</td>
<td>X</td>
<td>F</td>
<td>Q</td>
<td></td>
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<tr>
<td>Pit Large Order Execution</td>
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<td>P</td>
<td>F</td>
<td>R (FX), X (S&amp;P)</td>
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<tr>
<td>Pit Outright Option Cabinet Trade</td>
<td>20</td>
<td>1</td>
<td>P</td>
<td>Blank or 1</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Pit Spread Option Cabinet Trade</td>
<td>20</td>
<td>7</td>
<td>3,2</td>
<td>P</td>
<td>6</td>
<td>Q</td>
</tr>
<tr>
<td>Electronic Outright Option Cabinet Trade</td>
<td>20</td>
<td>1</td>
<td>E</td>
<td>2</td>
<td>Q</td>
<td></td>
</tr>
<tr>
<td>Electronic Spread Cabinet Option Trade</td>
<td>20</td>
<td>7</td>
<td>3</td>
<td>E</td>
<td>5</td>
<td>Q</td>
</tr>
<tr>
<td>SUB Spread Trade</td>
<td>23</td>
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<td>3</td>
<td>X</td>
<td>F</td>
<td>Q</td>
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<tr>
<td>Electronic SUB Outright Trade</td>
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<td>F</td>
<td>Q</td>
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</tr>
<tr>
<td>Electronic SUB Spread Trade</td>
<td>23</td>
<td>7</td>
<td>3</td>
<td>E</td>
<td>F</td>
<td>Q</td>
</tr>
</tbody>
</table>
## 6.0 Revision History

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<th>Version</th>
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<th>Author</th>
<th>Description</th>
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</thead>
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<td>1.0</td>
<td>11/18/08</td>
<td>NU</td>
<td>Initial release of document.</td>
</tr>
<tr>
<td>1.1</td>
<td>2/10/10</td>
<td>NU</td>
<td>Added OrigTrdDt. Updated hyperlinks to cmegroup.com/clearing.</td>
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