



# FIA Post-Trade Standards Working Group Trade Match Report Proposal

February 14, 2012

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**For Global Technical Committee Governance Internal Use Only**

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## Document History

| Revision | Date       | Author   | Revision Comments  |
|----------|------------|--|--|
| 0.02     | 2008-11-03 | Niranjana Sharma,<br>CME Group                                 | Initial Proposal as part of FIA Trade Reporting Gap Analysis   |
| 0.1      | 2011-09-02 | Hanno Klein,<br>Deutsche Börse Group                           | Moved initial proposal to standalone Gap Analysis and added detailed descriptions, added standard fields that have been added to the TCR since the initial draft and made other corrections.   |
| 0.2      | 2011-11-8  | Hanno Klein,<br>Deutsche Börse Group<br>Ryan Pierce, CME Group | Modified proposal following FIA PTWG onsite meeting in Chicago on October 13-14 <sup>th</sup> , 2011 as follows:<br><br>Moved the price and quantity related fields from the message level to the Instrument Match Side level.<br><br>Added new field TrdMatchSubID.<br><br>TrdInstrmtLegGrp changed to InstrmtLegGrp.<br><br>FillsGrp replaced with new component TrdInstrmtLegExecGrp, modeled from InstrmtLegExecGrp.<br><br>Added additional discussion points.  |
| 0.3      | 2011-12-13 | Hanno Klein,<br>Deutsche Börse Group<br>Ryan Pierce, CME Group | Additional proposed changes to address outstanding issues:<br><br>Use of TradeReportType instead of TradeReportTransType.<br><br>TradeMatchSubID moved to InstrmtMatchSideGrp level, allowing multiple match steps in one message.<br><br>Rename ExecutionTimestamp to TradeMatchTimestamp. Add TransactTime.<br><br>Clarified use of quantities. Changed TradeMatchQty to Quantity(53).<br><br>Added recommendation for Application Message Sequencing.<br><br>InstrmtMatchSideGrp is optional, conditionally required on trade submission.<br><br>Removed SecondaryExecID and ExecType.<br><br>Added SideTradeID. Move TradingSessionID and TradingSessionSubID to root level.<br><br>Added fields LegExecID, LegTradeID, LegTradeReportID.<br><br>Added Trade Match Report Ack message. |

|                         |                            |  |   |
|-------------------------|----------------------------|--|---|
|                         |                            |  | Added AvgPxGroupID.   |
| 0.4                     | 2012-01-24                 | Hanno Klein,<br>Deutsche Börse Group<br>Ryan Pierce, CME Group | <p>Clarified comments for TrdMatchID and NoInstrmtMatchSides, as well as for several fields in TrdMatchSideGrp.</p> <p>Added new fields SideMarketSegmentID, SideVenueType, and existing field MatchType.</p> <p>Moved fields and components SideTradeReportID, TrdMatchSideGrp, PriceType. Text, ExcodedTextLen, EncodedText.</p> <p>Added new MDStats group.</p> <p>Removed SideMultiLegReportingType.</p> <p>Added ClearingFeeIndicator to TrdMatchSideGrp. Also added SideClearingTradePrice, SidePriceDifferential, and SideClearingTradePriceType from the "OCC Extensions for Submission of SLEDS" Gap Analysis.</p> <p>Change TrdMatchSideGrp inclusion of TradeReportOrderDetail from required to optional to align with the TradeCaptureReport.</p> |
| 0.5                     | 2012-01-24<br>2012-02-07   | L. Taikitsadaporn  | <p>Clean up editing to indicate which field usage reference text to be included in the Repository.</p> <p>Added to Data Dictionary table proposed updates to descriptions for ClearingBusinessDate(715) and MultiLegReportingType(442).</p> <p>Updated Section 3 to</p> <ul style="list-style-type: none"> <li>recind the proposed new component MDStatsGrp until additional analysis can be conducted</li> </ul>   |
| 0.6                     | 2012-02-08<br>2012-02-14   | L. Taikitsadaporn  | <p>Updates/edits after the Feb. 8 2012 FIA PTWG call.</p> <p>Updated Section 3 to list fields that were removed from the new components.</p> <p>Updated Section 2 to remove duplicate information and reference to a Powerpoint for discussion around workflows and usage of the TradeMatchReport message.</p> <p>Clarified some field usage references.</p> <p>LegOrderQty(685) was kept in TrdInstrmtLegExecGrp component.</p> <p>MatchType(574) moved up to the main TradeMatchReport message level.</p>   |
| <a href="#">ASBUILT</a> | <a href="#">2012-04-04</a> | <a href="#">R. Shriver</a>                                     | <a href="#">Assigned TBD values for ASBUILT.</a>  |
|                         | <a href="#">2012-04-25</a> | <a href="#">L. Taikitsadaporn</a>                              | <a href="#">Added Data Dictionary descriptions for two new</a>  |

|  |  |                          |   |
|--|--|--------------------------|---|
|  |  |                          | <u>fields that were missing from the dictionary table.</u>  |
|  | <u>2012-04-28</u><br><u>2012-05-04</u> | <u>L. Taikitsadaporn</u> | <u>Edits made to clarify message/component synopsis texts or field/component usage reference texts.</u><br><u>Clarified enum value 3 of TradeMatchRejectReason(1897).</u> |
|  |  |                          |   |

## 1 Introduction

The FIA/FOA Post Trade Working Group (PTWG) has the objective to come up with a comprehensive set of business processes, work flows and message flows supported by the major Clearing entities in Europe and the United States. The effort started by identifying all the business processes supported by CCPs in Europe and US today. The effort is being coordinated by the FIA.

Since FIX had extensive support for Post Trade messaging for listed derivatives, FIX messages were used as a starting point for the message definition phase. This effort included agreeing on a common message dictionary and message flows. This document describes the proposed extensions to the FIX post trade messages and message flows required to support all the business processes and workflows by the CCPs.

The following new messages are proposed to support submission of matched trades (including complex match events with support for implied matches) from an Exchange to a CCP.

### **TradeMatchReport**

TradeMatchReport messages are used by exchanges and ECN's to report matched trades to CCPs as an atomic event. The messages are used to express the one-to-one, one-to-many and many-to-many matches as well as implied matches in which complex instruments can match with simple instruments.

### **TradeMatchReportAcknowledgement**

TradeMatchReportAcknowledgement messages are optionally used by CCPs to acknowledge the receipt of a TradeMatchReport. Their primary use is to send a negative acknowledgement to the exchange indicating a problem with a TradeMatchReport.

## 2 Business Workflow

The TradeMatchReport (TMR) extends the capabilities of the TradeCaptureReport(MsgType=AE) which is limited to a single instrument and a maximum of two sides. Technically, the TradeCaptureReport would allow more sides as it is a repeating group but it is intended to cover a single trade between only two parties.

Please refer to the accompany Powerpoint slide deck for workflows covered by this proposal. (Note: the material will be incorporated into this gap analysis during the Global Technical Committee review and public comment period of the proposal).

## 3 Issues and Discussion Points

- Do we need TrdInstrmtLegGrp within InstrmtMatchSideGrp which has many additional fields or is InstrmtLegGrp sufficient which only allows to identify the multi-leg instrument? TCR uses TrdInstrmtLegGrp and the TMR is supposed to be identical to the TCR, just with another repeating group around instruments and allowing more than two sides per instrument.

Resolution: InstrmtLegGrp will be used. Legs can be identified with LegID, and referenced by the LegRefID field in the TrdInstrmtLegExecGrp.

- What was the purpose of having LastQty and LastPx on the root level?

Resolution: Moved these fields from the root message level to the Instrument Match Side level.

- Should InstrmtMatchSideGrp be required, as it is now? If TradeReportTransTyp is cancelling, releasing, reversing, or backing out a match event, does everything need to be specified?



- Do we need Ref ID's for cancellation, modification, etc.?

Resolution: No. An entity level identifier (TrdMatchID) which does not change will be retained. This requires reliable sequencing.

- Why is SecondaryExecID on the root level of the TMR message?

Resolution: Remove, along with ExecType.

- How do we represent IDs if Mass Quote participates in a match cycle?

Resolution: This is already covered. TradeReportOrderDetail, as well as Execution Report, contain comments about use of ClOrdID and SecondaryClOrdID for this purpose.

- Do we need a TMR Ack?

Resolution: Yes. Added.

- Do we want to support fragmentation for the TMR?

Resolution: Not at this time. This can be considered if a business need emerges.

- Need Average Price Grouping in TMR.

Resolution: Added AvgPxGroupID to the TrdMatchSideGrp.

Open Issue: Do we need any field at the side level for the average price itself?

- The initial proposal for a MDStatsGrp has been recinded from this proposal for the time being to avoid premature decision on this new requirement. A future gap analysis will be conducted which will also be reconciled with over all market data statistics requirements.
- Removed fields related to FX and Fixed Income asset types until further analysis can be conducted and when there is a business requirement to support these asset types in the TradeMatchReport message. Additionally some other fields were removed as it was determined as not needed in a TradeMatchReport by the first groups of implementors. Should future requirements be presented to the Global Technical Committee that requests some of these fields be added to the message, the request would be considered. Below lists the fields removed from the new components from earlier drafts of this proposal:

| <b>InstrmtMatchSideGrp component</b> | <b>TrdMatchSideGrp component</b> | <b>TrdInstrmtLegExecGrp component</b> |
|--------------------------------------|----------------------------------|---------------------------------------|
| CalculatedCcyLastQty(1056)           | RptSeq(83)                       | LegSwapType(690)                      |
| LastParPx(669)                       | ProcessCode(81)                  | LegStipulations component             |
| LastSpotRate(194)                    | NumDaysInterest(157)             | LegAllocID(1366)                      |
| LastForwardPoints(195)               | ExDate(230)                      | LegPreAllocGrp component              |
| LastSwapPoints(1071)                 | AccruedInterestRate(158)         | LegSettlType(587)                     |
| MDStatsGrp component                 | AccruedInterestAmt(159)          | LegSettlDate(588)                     |
|                                      | InterestAtMaturity(738)          | LegLastForwawrdPoints(1073)           |
|                                      | EndAccruedInterestAmt(920)       | LegCalculatedCcyLastQty(1074)         |
|                                      | StartCash(921)                   | LegGrossTradeAmt(1075)                |
|                                      | EndCash(922)                     | LegVolatility(1379)                   |
|                                      | Concession(238)                  | LegDividendYield(1381)                |

|  |                                |                        |
|--|--------------------------------|------------------------|
|  | TotalTakedown(237)             | LegCurrencyRatio(1383) |
|  | NetMoney(118)                  | LegExecInst(1384)      |
|  | SettlCurramt(119)              |                        |
|  | SettlCurrFxRate(155)           |                        |
|  | SettlCurrFxRateCalc(156)       |                        |
|  | SideMultiLegReportingType(752) |                        |

## 4 Proposed Message Flow

The primary identifier for the TradeMatchReport is a business-level identifier, TrdMatchID(tbd). This ID does not change during the life cycle of the match event, even if the match event is amended or cancelled. As such, the TradeMatchReport does not have, nor does it need, a reference ID field. Amending a TradeMatchReport entails sending another TradeMatchReport message with the same TrdMatchID(tbd) and an appropriate TradeReportType(856). It follows that issues with unreliable message delivery, including reordering and duplication, could be difficult to detect. As such, best practices for TradeMatchReport include:

1. Use of Application Message Sequencing (via the ApplicationSequenceControl component) to detect and correct gaps, duplication, and reordering of messages is recommended.
2. Alternately, or in conjunction with Application Message Sequencing, middleware providing reliable, ordered message delivery can be used. Note that some reliable middleware may not be able to handle all types of errors.

## 5 FIX message tables

### 5.1 FIX Message TradeMatchReport(35=~~TBDDC~~)

|   |  |                  |
|---|--|------------------|
| Message Name                            |  | TradeMatchReport |
| Message Abbreviated Name (for FIXML)    |  | TrdMtchRpt       |
| Category                                |  | Post Trade       |
| Message Synopsis                        | <p><u>The</u> TradeMatchReport(35=<del>DC</del>) message is used by exchanges and ECN's to report matched trades to central counterparties (CCPs) as an atomic event. The message is used to express the one-to-one, one-to-many and many-to-many matches as well as implied matches in which more complex instruments can match with simpler instruments.</p> |                  |
| Message Elaboration                     |  |                  |
| To be finalized by FPL Technical Office |  |                  |
| (MsgType(tag 35) Enumeration)           | <a href="#">DC</a>   |                  |
| Repository Component ID                 | <a href="#">139</a>  |                  |

| Tag   | FieldName                  | Req'd    | Mapping Usage and Comments  | Action     | FIX Spec Comments  |
|---|----------------------------|----------|---|------------|--|
| StandardHeader                                  |                            | Y        |   |            | MsgType = <b>DCTBD</b>   |
| component block<br><ApplicationSequenceControl> |                            | N        |   | ADD        |  |
| 880   | TrdMatchID                 | Y        | Trade match identifier assigned in the matching engine and used to correlate a cleared trade with a match event. Should be common for all trades included in a match event.<br>Conditionally required for trades reported from a matching platform. | ADD        | Unique identifier common for all trades included in a match event.   |
| 574   | MatchType                  | N        |   | ADD        |  |
| 856   | TradeReportType            | N        | Identifies the type of trade. Can indicate new submissions, addendums, cancellations, etc.  | ADD        |  |
| 715   | ClearingBusinessDate       | N        | The business date for which the trade is expected to be cleared   | ADD        |  |
| 828   | TrdType                    | N        |   | ADD        |  |
| 829   | TrdSubType                 | N        |   | ADD        |  |
| 75  | TradeDate                  | N        |   | ADD        | Used when reporting other than current day trades.   |
| 1301  | MarketID                   | N        |   | ADD        |  |
| 1300  | MarketSegmentID            | N        |   | ADD        |  |
| 336   | TradingSessionID           | N        |   | ADD        |  |
| 625   | TradingSessionSubID        | N        |   | ADD        |  |
| 1430  | VenueType                  | N        | Identifies the type of venue where a trade was executed   | ADD        |  |
| <b>1888</b><br><b>TBD</b>                       | <b>TradeMatchTimestamp</b> | <b>N</b> | Timestamp of the trade or match event. For off-exchange trades the time at which the deal was negotiated or matched by the exchange. This timestamp will be the same on all the trades and will not change when a trade is modified.                | <b>NEW</b> |  |
| 60  | TransactTime               | N        | Indicates time of the transaction. Used after initial submission to indicate time of addendum, cancellation, etc.   | ADD        | Time of the match event or transaction that resulted in this match report.   |
| 442   | MultiLegReportingType      | N        | Type of report if multileg instrument.  | ADD        | Differentiates match events involving complex instruments<br>(MultiLegReportingType(442)=3(multi-leg security)) from those only involving simple instruments |

| Tag | FieldName                                | Req'd | Mapping Usage and Comments   | Action | FIX Spec Comments   |
|-----|--|-------|--|--------|---|
|     |  |       |  |        | (MultiLegReportingType(442)=1(single security)). MultiLegReportingType(442)=2(individual leg of multi-leg security) should not be used. |
|     | component block<br><InstrmtMatchSideGrp> | N     | Match sides per instrument. This is conditionally required when submitting a new trade, e.g. TradeReportType = Submit (0). | NEW    | Conditionally required when TradeReportType(856) = Submit(0).   |
|     | StandardTrailer                          | Y     |  |        |   |

## 5.2 FIX Message TradeMatchReportAck(35=~~TB~~DD)

|   |  |                     |
|---|--|---------------------|
| Message Name                            |  | TradeMatchReportAck |
| Message Abbreviated Name (for FIXML)    |  | TrdMtchRptAck       |
| Category                                |  | Post Trade          |
| Message Synopsis                        | <u>The TradeMatchReportAck(35=DD) is used to acknowledge to respond to the a TradeMatchReport(35=DC) message. It may be used to report on the status of the request (e.g. accepting the request or rejecting the request).</u> |                     |
| Message Elaboration                     |  |                     |
| To be finalized by FPL Technical Office |  |                     |
| (MsgType(tag 35) Enumeration)           | <a href="#">DD</a>   |                     |
| Repository Component ID                 | <a href="#">140</a>  |                     |

| Tag                    | FieldName                                       | Req'd | Mapping Usage and Comments   | Action | FIX Spec Comments   |
|------------------------|---|-------|--|--------|---|
|                        | StandardHeader                                  | Y     |  |        | MsgType = <del>DD</del> TBD   |
|                        | component block<br><ApplicationSequenceControl> | N     |  | ADD    |   |
| 880                    | TrdMatchID                                      | Y     | Indicates the Match ID of the Trade Match Report being acknowledged. | ADD    | Identifier of the TradeMatchReport(35= <del>D</del> C) being acknowledged.                          |
| <del>1896</del><br>TBD | TradeMatchAckStatus                             | Y     |  | NEW    |   |
| <del>1897</del><br>TBD | TradeMatchRejectReason                          | N     |  | NEW    | Conditionally required when TradeMatchAckStatus( <del>tb</del><br><del>4</del> 1896) = Rejected(2). |
| 1328                   | RejectText                                      | N     |  | ADD    |   |
| 1664                   | EncodedRejectTextLen                            | N     |  | ADD    |   |

| Tag             | FieldName         | Req'd | Mapping Usage and Comments | Action | FIX Spec Comments |
|-----------------|-------------------|-------|----------------------------|--------|-------------------|
| 1665            | EncodedRejectText | N     |                            | ADD    |                   |
| 58              | Text              | N     |                            | ADD    |                   |
| 354             | EncodedTextLen    | N     |                            | ADD    |                   |
| 355             | EncodedText       | N     |                            | ADD    |                   |
| StandardTrailer |                   | Y     |                            |        |                   |

## 6 FIX component blocks

### 6.1 Component InstrmtMatchSideGrp

|   |   |                               |
|---|---|-------------------------------|
| Component Name                          |   | <i>InstrmtMatchSideGrp</i>    |
| Component Abbreviated Name (for FIXML)  |   | <i>InstrmtMchSide</i>         |
| Component Type                          |   | _X_ Block Repeating ___ Block |
| Category                                |   |                               |
| Component Synopsis                      | The InstrmtMatchSideGrp component is used to convey all trades for a given match event reported by instrument and trade side.   |                               |
| Component Elaboration                   | Each trade match report can contain any number of trades for any number of instruments. This component contains all instruments together with all of the trade sides (possibly more than two) that occurred for each -instrument within the same match event. |                               |
| To be finalized by FPL Technical Office |   |                               |
| Repository Component ID                 | <a href="#">2217</a>  |                               |

| Component FIXML Abbreviation: <InstrmtMchSide> |                                 |       |   |        |  |
|--|---------------------------------|-------|---|--------|--|
| Tag  | FieldName                       | Req'd | Mapping Usage and Comments  | Action | FIX Spec Comments  |
| <del>1889</del><br>TBD                         | NoInstrmtMatchSides             | N     | Number of instrument match sides that are part of the same match event  | NEW    |  |
| →<br>  | Component Block <Instrument>    | N     | Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages"                     | ADD    | Required if NoInstrmtMatchSides( <del>1889</del> ) > 0.  |
| →<br>  | Component Block <InstrmtLegGrp> | N     | Identifies a Multi-leg Execution if present. Note that LegID should be present if individual leg executions will be referenced in | ADD    | LegID(1788) in the InstrmtLegGrp component can be used to reference individual leg executions <del>are</del> referenced in the TrdInstrmtLegExecGrp component with |

|                   |                                      |               | TrdInstrmtLegExecGrp. |   | LegRefID(654). |  |
|-------------------|--------------------------------------|---------------|-----------------------|---|----------------|--|
| →                 | Component Block<br><UndInstrmtGrp>   |               | N                     |   | ADD            |  |
| →                 | 1891<br>TBD                          | TrdMatchSubID | N                     | Can be used to identify distinct price levels within a match event, e.g. Match Steps or Clips.  | NEW            |  |
| →                 | 53                                   | Quantity      | N                     |   | NEW            | Total quantity for this instrument in this match event. This is the cumulative sum of LastQty(32) for all match steps for this instrument.   |
| →                 | 15                                   | Currency      | N                     |   | ADD            |  |
| →                 | 120                                  | SettlCurrency | N                     | Contra currency of the deal. Used to qualify CalculatedCcyLastQty   | ADD            |  |
| →                 | 854                                  | QtyType       | N                     |   | ADD            |  |
| →                 | 32                                   | LastQty       | N                     | Trade Quantity for this instrument within this Match Step. This is determined as follows:<br><br>For each TrdMatchSideGrp instance contained within this InstrmtMatchSideGrp instance, sum the SideLastQty field if the Side is a buy. Likewise, take the sum if the side is a sell. LastQty will be the greater of these two sums. | ADD            | Required if NoInstrmtMatchSides( <del>tb4</del> 1889) > 0.<br><br>Trade quantity for this instrument within this match step. The value is the greater of the sum of SideLastQty(1009) of each side (i.e. buy or sell) for each TrdMatchSideGrp instance within the current InstrmtMatchSideGrp instance. |
| →                 | 423                                  | PriceType     | N                     | <u>(NB: removing this field usage comment as it is too specific with the mention of "cabinet trade price" to make thi msg applicable to any traded securities.)</u>   | ADD            | <del>Can be used to qualify LastPx(31) when the price is cabinet trade price.</del>  |
| →                 | 31                                   | LastPx        | N                     | Trade Price.  | ADD            | Required if NoInstrmtMatchSides( <del>tb4</del> 1889) > 0.   |
| →                 | 30                                   | LastMkt       | N                     |   | ADD            |  |
| →                 | Component Block<br><TrdMatchSideGrp> |               | N                     |   | NEW            | Required if NoInstrmtMatchSides( <del>tb4</del> 1889) > 0.   |
| </InstrmtMchSide> |                                      |               |                       |   |                |  |

## 6.2 Component TrdMatchSideGrp

|   |   |                               |
|---|---|-------------------------------|
| Component Name                          |   | <i>TrdMatchSideGrp</i>        |
| Component Abbreviated Name (for FIXML)  |   | <i>TrdMtchSide</i>            |
| Component Type                          |   | _X_ Block Repeating ___ Block |
| Category                                |   |                               |
| Component Synopsis                      | The TrdMatchSideGrp component conveys all trade sides for a single instance of the InstrmtMatchSideGrp component. |                               |
| Component Elaboration                   |   |                               |
| To be finalized by FPL Technical Office |   |                               |
| Repository Component ID                 | <a href="#">2218</a>  |                               |

| Component FIXML Abbreviation: <TrdMtchSide> |  |                   |       |  |        |  |
|---|--|-------------------|-------|--|--------|--|
| Tag   | FieldName                              |                   | Req'd | Mapping Usage and Comments   | Action | FIX Spec Comments  |
| <a href="#">1890</a><br><del>TBD</del>      | NoTrdMatchSides                        |                   | N     | Number of trade match sides  | NEW    |  |
| →   | 54                                     | Side              | N     |  | ADD    | Required if NoTrdMatchSides( <del>tb</del> <a href="#">1890</a> ) > 0. |
| →   | 1427                                   | SideExecID        | N     | This refers to the ExecID of the execution being reported. Used in trade reporting models that utilize different execution IDs for each side of the trade. This is used when reporting a trade with two or more sides. | ADD    |  |
| →   | <a href="#">1900</a><br><del>TBD</del> | SideExecRefID     | N     |  | NEW    |  |
| →   | 1506                                   | SideTradeID       | N     |  | ADD    |  |
| →   | 1005                                   | SideTradeReportID | N     | Used to indicate the report ID for this trade match side.  | ADD    |  |
| →   | 1428                                   | OrderDelay        | N     | Time lapsed from order entry until match, based on the unit of time specified in OrderDelayUnit. Default is seconds if OrderDelayUnit is not specified. Value = 0,   | ADD    |  |

|   |                           |                            |   |  |     |  |
|---|---------------------------|----------------------------|---|--|-----|--|
|   |                           |                            |   | indicates the aggressor (the initiating side of the trade)   |     |  |
| → | 1429                      | OrderDelayUnit             | N | Used in conjunction with OrderDelay to specify the time unit being expressed. Default is "seconds" if not specified. | ADD |  |
| → | 1009                      | SideLastQty                | N | Used to indicate the quantity for this trade match side.   | ADD | Required if NoTrdMatchSides( <del>1890</del> ) > 0.<br><br>Used to indicate the matched quantity for this trade side as a result of the match event. |
| → | 1597                      | SideClearingTradePrice     | N | Used to indicate a side specific alternate clearing price.   | ADD |  |
| → | 1599                      | SidePriceDifferential      | N | Used to indicate the Price Differential between the first and second leg of a complex instrument.                    | ADD |  |
| → | 1598                      | SideClearingTradePriceType | N | Used to indicate whether the trade is clearing using execution price or alternate clearing price.                    | ADD |  |
| → | 1006                      | SideFillStationCd          | N | Used for order routing to indicate the Fill Station Code for this trade match side.                                  | ADD |  |
| → | 1007                      | SideReasonCd               | N | Used to indicate the reason for execution for this trade match side.   | ADD |  |
| → | 1008                      | SideTrdSubTyp              | N | Used to support multi-sided orders of different trade types.   | ADD |  |
| → | 430                       | NetGrossInd                | N | Code to represent whether value is net (inclusive of tax) or gross.  | ADD |  |
| → | 1154                      | SideCurrency               | N | Used to identify the currency of the trade match side.   | ADD |  |
| → | 1155                      | SideSettlCurrency          | N | Used to identify the settlement currency of the trade match side.  | ADD |  |
| → | component block <Parties> |                            | N | Insert here the set of "Parties" (firm identification) fields defined in "Common Components of                       | ADD | Required if NoTrdMatchSides( <del>1890</del> ) > 0.  |



|   |  |                              |   | Application Messages"  |     |   |
|---|--|------------------------------|---|--|-----|---|
| → | 578                                      | TradeInputSource             | N |  | ADD |   |
| → | 579                                      | TradeInputDevice             | N |  | ADD |   |
| → | 376                                      | ComplianceID                 | N |  | ADD |   |
| → | 377                                      | SolicitedFlag                | N |  | ADD |   |
| → | 582                                      | CustOrderCapacity            | N | The customer capacity for this trade.  | ADD |   |
| → | 943                                      | TimeBracket                  | N |  | ADD |   |
| → | 77                                       | PositionEffect               | N |  | ADD | For use in derivatives omnibus accounting.  |
| → | 825                                      | ExchangeRule                 | N | Used to report any exchange rules that apply to this trade.  | ADD |   |
| → | 826                                      | TradeAllocIndicator          | N | Identifies if the trade is to be allocated.  | ADD |   |
| → | 591                                      | PreallocMethod               | N |  | ADD |   |
| → | 70                                       | AllocID                      | N |  | ADD |   |
| → | component block <TrdAllocGrp>            |                              | N |  | ADD |   |
| → | 1072                                     | SideGrossTradeAmt            | N |  | ADD |   |
| → | 1057                                     | AggressorIndicator           | N |  | ADD |   |
| → | 1139                                     | ExchangeSpecialInstructions  | N |  | ADD |   |
| → | 1690                                     | SideShortSaleExemptionReason | N |  | ADD |   |
| → | 1115                                     | OrderCategory                | N |  | ADD |   |
| → | 819                                      | AvgPxIndicator               | N |  | ADD |   |
| → | 1731                                     | AvgPxGroupID                 | N | Identifies the average price group for the trade.  | ADD |   |
| → | <u>1898</u><br><u>TBD</u>                | SideMarketSegmentID          | N | Used instead of MarketSegmentID(1300) when market segment may be different across sides. Note that the market cannot be different across sides and is specified in MarketID(1301). | NEW | Can be used if the match event results in matches across different market segments for this side. |
| → | <u>1899</u><br><u>TBD</u>                | SideVenueType                | N | Used instead of VenueType(1430) when venue type may be different across sides.   | NEW | Can be used if the match event results in matches across different venue types for this side.     |
| → | 635                                      | ClearingFeeIndicator         | N |  | ADD |   |
| → | component block <TradeReportOrderDetail> |                              | N | Carries order related details.   | ADD |   |
| → | component block <TrdInstrmtLegExecGrp>   |                              | N | Specifies the partial fills of the order related to the current trade match side.  | ADD |   |
| → | 1031                                     | CustOrderHandlingInst        | N |  | ADD |   |
| → | 1032                                     | OrderHandlingInstSource      | N |  | ADD |   |
| → | 58                                       | Text                         | N | May be used by the executing market to   | ADD | Can be used to include text included in the order   |

|               |     |                |   |  |     |             |
|---------------|-----|----------------|---|--|-----|-------------|
|               |     |                |   | record any execution Details that are particular to that market.   |     | submission. |
| →             | 354 | EncodedTextLen | N | Must be set if EncodedText field is specified and must immediately precede it.   | ADD |             |
| →             | 355 | EncodedText    | N | Encoded (non-ASCII characters) representation of the Text field in the encoded format specified via the MessageEncoding field. | ADD |             |
| </TrdMchSide> |     |                |   |  |     |             |

### 6.3 Component TrdInstrmtLegExecGrp

|   |   |                               |
|---|---|-------------------------------|
| Component Name                          |   | <i>TrdInstrmtLegExecGrp</i>   |
| Component Abbreviated Name (for FIXML)  |   | <i>LegExec</i>                |
| Component Type                          |   | _X_ Block Repeating ___ Block |
| Category                                |   |                               |
| Component Synopsis                      | <del>This</del> <del>The</del> <u>TrdInstrmtLegExecGrp</u> component <del>block</del> comprises individual executions for legs of the trade side of a trade match report for a specific instrument. |                               |
| Component Elaboration                   |   |                               |
| To be finalized by FPL Technical Office |   |                               |
| Repository Component ID                 | <a href="#">2219</a>  |                               |

| Component FIXML Abbreviation: <LegExec>          |  |              |   |  |                   |   |
|--|--|--------------|---|--|-------------------|---|
| Tag  | FieldName                              | Req'd        | Mapping Usage and Comments  | Action   | FIX Spec Comments |   |
| <del>189</del><br><del>24</del><br><del>BD</del> | NoLegExecs                             | N            | Number of legs. Identifies a Multi-leg Execution if present and non-zero. | ADD  |                   |   |
| →  | 654                                    | LegRefID     | N   | Required when NoLegs > 0. Used to identify a specific leg. | ADD               | Required if NoLegExecs( <del>td</del> <a href="#">1892</a> ) > 0. |
| →  | <a href="#">1893</a><br><del>TBD</del> | LegExecID    | N   |  | NEW               |   |
| →  | <a href="#">1901</a>                   | LegExecRefID | N   |  | NEW               |   |

|            |                                  |                             |   |   |     |   |
|------------|----------------------------------|-----------------------------|---|---|-----|---|
|            | TBD                              |                             |   |   |     |   |
| →          | 1894<br>TBD                      | LegTradeID                  | N |   | NEW |   |
| →          | 1895<br>TBD                      | LegTradeReportID            | N |   | NEW |   |
| →          | 685                              | LegOrderQty                 | N |   | ADD |   |
| →          | 564                              | LegPositionEffect           | N | Provide if the PositionEffect for the leg is different from that specified for the overall multileg security      | ADD | Can be used to specify the position effect for the leg if it is different from the position effect of the overall multi-leg security. |
| →          | 565                              | LegCoveredOrUncovered       | N | Provide if the CoveredOrUncovered for the leg is different from that specified for the overall multileg security. | ADD | Can be used to specify whether the option is a cover <sub>1</sub> if it is different from the overall multi-leg security.             |
| →          | component block <NestedParties3> |                             | N |   | ADD |   |
| →          | 637                              | LegLastPx                   | N | Used to report the execution price assigned to the leg of the multileg instrument                                 | ADD |   |
| →          | 686                              | LegPriceType                | N |   | ADD |   |
| →          | 675                              | LegSettlCurrency            | N |   | ADD |   |
| →          | 1689                             | LegShortSaleExemptionReason | N | Optional when LegSide (624) = 6 (Short sale exempt)   | ADD |   |
| →          | 1418                             | LegLastQty                  | N |   | ADD |   |
| →          | 1591                             | LegQtyType                  | N |   | ADD |   |
| </LegExec> |                                  |                             |   |   |     |   |

## Appendix A - Data Dictionary

| Tag                               | Field Name          | Action | Data type     | Description  | FIXML Abbreviation | Add to / Deprecate from Message type or Component block |
|-----------------------------------|---------------------|--------|---------------|--|--------------------|---|
| 35                                | MsgType             | CHANGE | String        | <del>DCTBD</del> = TradeMatchReport<br><del>DDTBD</del> = TradeMatchReportAck  |                    |   |
| <del>1888</del><br><del>TBD</del> | TradeMatchTimestamp | NEW    | UTCTime stamp | Timestamp of the match event. For off-exchange trades the time at which the deal was matched by the exchange.<br>This timestamp will be the same on all the trades and will not change when a trade is modified. | @MtchTS            | Add to TradeMatchReport                                 |
| <del>1889</del><br><del>TBD</del> | NoInstrmtMatchSides | NEW    | NumInGroup    | Number of instrument match sides.  |                    | Add to InstrmtMatchSideGrp                              |
| <del>1890</del><br><del>TBD</del> | NoTrdMatchSides     | NEW    | NumInGroup    | Number of trade match sides.   |                    | Add to TrdMatchSideGrp                                  |
| <del>1891</del><br><del>TBD</del> | TrdMatchSubID       | NEW    | String        | Used to identify each price levels within a match event, e.g. each match steps or clips.   | @MtchSubID         | Add to TradeMatchReport                                 |
| <del>1892</del><br><del>TBD</del> | NoLegExecs          | NEW    | NumInGroup    | Number of instrument leg executions.   |                    | Add to TrdInstrmtLegExecGrp                             |
| <del>1893</del><br><del>TBD</del> | LegExecID           | NEW    | String        | The ExecID(17) value corresponding to a trade leg.   | @ExecID            | Add to TrdInstrmtLegExecGrp                             |
| <del>1894</del><br><del>TBD</del> | LegTradeID          | NEW    | String        | The TradeID(1003) value corresponding to a trade leg.  | @TrdID             | Add to TrdInstrmtLegExecGrp                             |
| <del>1895</del><br><del>TBD</del> | LegTradeReportID    | NEW    | String        | The TradeReportID(571) value corresponding to a trade leg.   | @RptID             | Add to TrdInstrmtLegExecGrp                             |
| <del>1896</del><br><del>TBD</del> | TradeMatchAckStatus | NEW    | int           | Used to indicate the status of the trade match report submission.<br><br>Valid values:<br>0 = Received, not yet processed<br>1 = Accepted<br>2 = Rejected  | @MtchAckStat       | Add to TradeMatchReportAck                              |

|   |                        |        |                                  |   |            |                             |
|---|------------------------|--------|----------------------------------|---|------------|-----------------------------|
| <a href="#">1897</a><br><a href="#">TBD</a> | TradeMatchRejectReason | NEW    | int<br><br>[Reserved<br>100Plus] | Reason the trade match report submission was rejected.<br><br>Valid values:<br>0 = Successful (default)<br>1 = Invalid party information<br>2 = Unknown instrument<br>3 = <del>Unauthorized</del> Not authorized to report trades<br>4 = Invalid trade type<br>99 = Other | @RejRsn    | Add to TradeMatchReportAck  |
| <a href="#">1898</a><br><a href="#">TBD</a> | SideMarketSegmentID    | NEW    | String                           | Identifies the market segment of the side.  | @MktSegID  | Add to TrdMatchSideGrp      |
| <a href="#">1899</a><br><a href="#">TBD</a> | SideVenueType          | NEW    | char                             | Identifies the type of venue where the trade was executed for the side.<br><br>[Uses enums from VenueType(1430)]  | @VenuTyp   | Add to TrdMatchSideGrp      |
| <a href="#">1900</a><br><a href="#">TBD</a> | SideExecRefID          | NEW    | String                           | Used to reference the value from SideExecID(1427).  | @ExecRefID | Add to TrdMatchSideGrp      |
| <a href="#">1901</a><br><a href="#">TBD</a> | LegExecRefID           | NEW    | String                           | Used to reference the value from LegExecID(1893).   | @ExecRefID | Add to TrdInstrmtLegExecGrp |
| 715   | ClearingBusinessDate   | CHANGE |                                  | The business date for which the trade is expected to be cleared. <del>Identifies the Business Date</del>  |            |                             |
| 442   | MultiLegReportingType  | CHANGE |                                  | Used to indicate how the multi-legged security (e.g. option strategies, spreads, etc.) is being reported. Used to indicate what an Execution Report represents (e.g. used with multi-leg securities, such as option strategies, spreads, etc.);                           |            |                             |

## Appendix B - Glossary Entries

| Term | Definition | Field where used |
|------|------------|------------------|
|      |            |                  |
|      |            |                  |
|      |            |                  |
|      |            |                  |

## Appendix C – Abbreviations

| Term | Proposed Abbreviation | Proposed Messages, Components, Fields where used |
|------|-----------------------|--|
|      |                       |  |
|      |                       |  |
|      |                       |  |

## Appendix D - Usage Examples

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