



# Global Exchanges and Markets Committee

## Canadian Market Regulation Feed Gap Analysis

**April 2, 2009**

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## Document History

Revision	Date	Author	Revision Comments
0.1	February 18, 2009	P. Allen	Document initiated.
0.2	February 4, 2009	P. Allen	Added "Insider Account" and "Significant Shareholder" to OrderRestrictions Field. Added InternalCross field. Removed "OutsideQuote" as an additional enumerator requirement for Tag <855>. Added NCIB enumerator to OrderRestrictions <529>. Added "Special Terms" enumerator to LotType <1093>.
0.3	March 12, 2009	P. Allen	Added full Execution and Trade Capture reports. Removed Quote messages.
0.4	March 24, 2009	P. Allen	Added PreTradeAnonymity (1091) to TradeReportOrderDetail and OrigClOrdID (41) to TradeReportOrderDetail
0.5	March 29, 2009 April 2, 2009	P. Allen	Added existing definitions and enumerators to data dictionary. Added field mapping diagram. Removed Non-net and Derivative related from SettlType, Removed references to UMIR group. Mapped client and non-client in existing Tag 581. Modified Bypass order description. Changed priority time stamp to Time Priority

# 1 Introduction

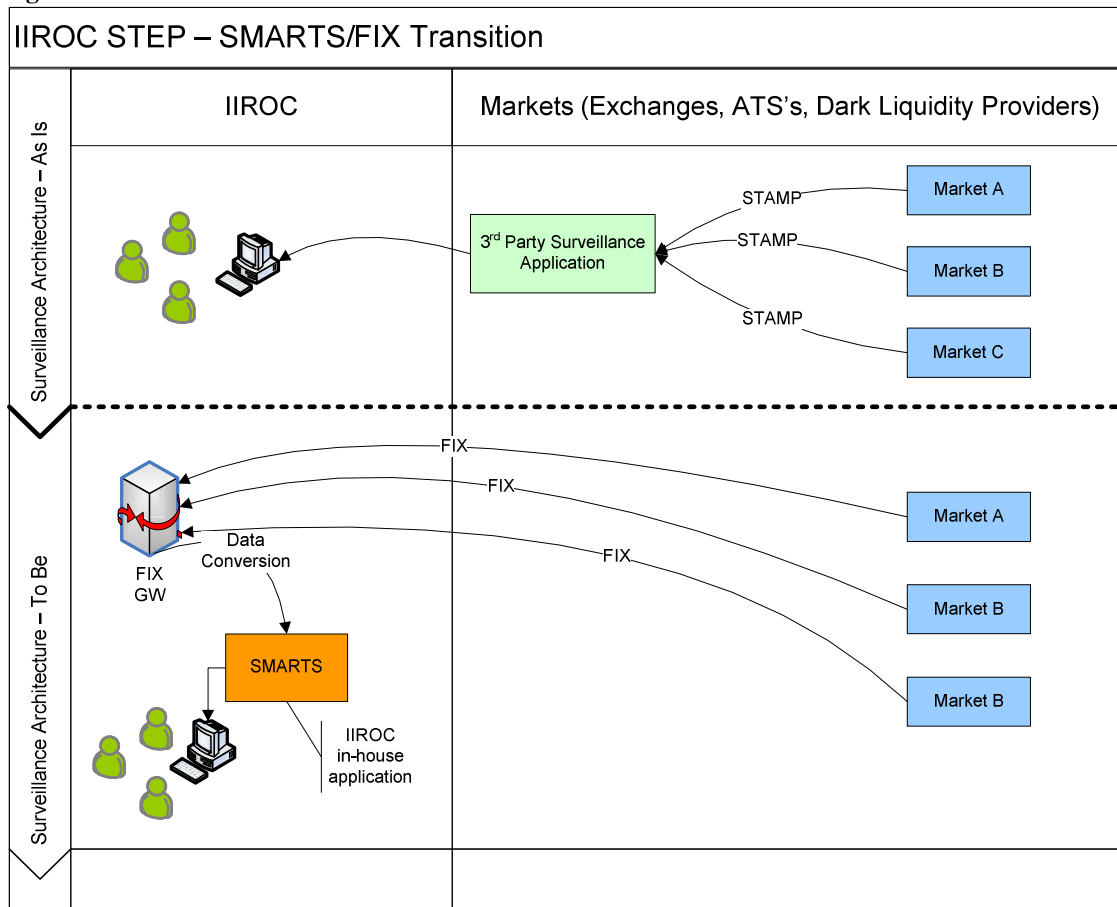
One of the functions of the Investment Industry Regulatory Organization of Canada (IIROC) is to conduct real-time market surveillance to ensure that trading is carried out in accordance with securities trading rules. To facilitate this task, IIROC requires each market to provide real-time market transaction data to its market surveillance system – otherwise referred to as a “market regulation feed”. To help accommodate this requirement, IIROC is in the process of developing a FIX Market Regulation Feed Specification. It is envisioned that the specification will be used by the markets to update and configure their respective FIX engines.

IIROC in consultation with the Canadian Markets and FPL has chosen FIX Version 5.0 for the market regulation feed.

# 2 Business Workflow

Canadian markets are currently feeding a proprietary market surveillance system with data using a messaging protocol other than FIX. IIROC will be rolling out its own surveillance system in 2009 and will eventually require markets to provide their regulation feeds in FIX format (See Figure 1 - FIX Transition)

Figure 1 - FIX Transition



### 3 Issues and Discussion Points

The move to a regulatory feed based on FIX is both feasible and appealing for both IIROC and Canada's market participants. The following application message types have been identified as being suitable for the market regulation feed:

FIX Message	Message Type
Execution Report	8
Quote	S
Quote Status Report	AI
Trade Capture Report	AE
News	B
Trading Session Status	h
Security Status	f
Security List	y

Most Markets in Canada are FIX 4.2 enabled. To satisfy certain Canadian equity market attributes, several UDF's were registered by the Toronto Stock Exchange (TSE) and other market participants. However, the move to FIX version 5.0 for the regulatory feed provides an opportunity to implement a more standardized version of FIX while still accommodating the unique characteristics and regulatory requirements inherent to the Canadian marketplace.

In terms of customization, the Execution and Trade Capture reports garner the most consideration.

#### 3.1 Execution Report

Execution Reports will be used to track the lifecycle of orders being received by the various markets. With one notable exception, the standard Execution Report requires little change in terms of new fields, enumerators, etc. However, with respect to cross order types, the current and new surveillance system requires one Execution Report per cross order that is quasi two sided. It is recognized that the normal sequencing protocol is for the market to send two Execution Reports (one for each side of the cross) or one Trade Capture report depending on the jurisdiction. IIROC's requirements are somewhat different as it requires one cross Execution Report followed by a Trade Capture report. This is due to the potential for cross interference to occur when orders from the same firm already exist in the book at the same price when the cross is entered.

The Cross Confirmation Report currently being consumed by the surveillance system contains both buy and sell-side information for the following fields:

- OrderID (Required)
- AccountType (Required)
- Account
- RegulationID
- JitneyBrokerNumber

In order to accommodate these requirements, IIROC will use a number of pre-existing, registered UDF's. As such, no additional fields are being requested or proposed in this Gap Analysis to satisfy IIROC's cross confirmation reporting requirements.

### 3.2 Trade Capture Report

Very few additions/modifications to the Trade Capture are being proposed in this document.

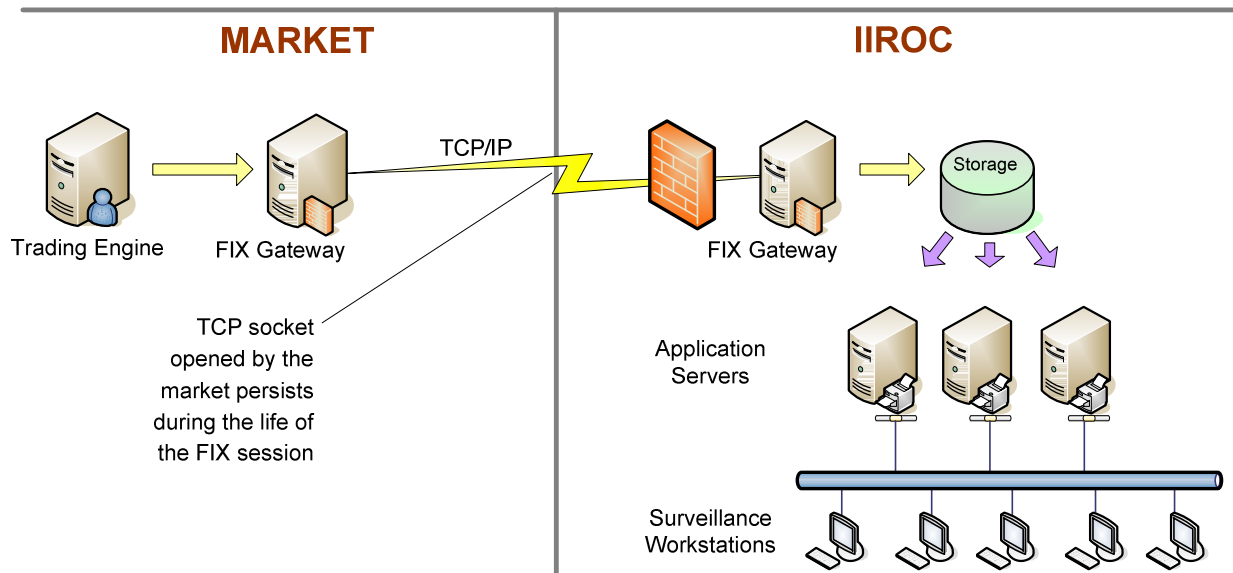
### 3.3 Quote, Quote Status Reports, Quote Response

One field addition is required for the Quote message which, for consistency, should be made in both the Quote Status Report and Quote Response messages.

## 4 Proposed Message Flow

The market regulation feed is innately one-way – from the markets to IIROC. Outside of standard session level messaging, bi-directional communication is not required.

Figure 2: Market Dataflow Diagram





## 5 FIX message tables

### 5.1 Execution Report (8)

Tag	FieldName	Req'd	Comments	Action	Mapping Usage and Comments
StandardHeader		Y	MsgType = 8		
component block <ApplicationSequenceControl>		N	For use in drop copy applications. NOT FOR USE in transactional applications.		
37	OrderID	Y	OrderID is required to be unique for each chain of orders.		
198	SecondaryOrderID	N	Can be used to provide order id used by exchange or executing system.		
526	SecondaryClOrdID	N	In the case of quotes can be mapped to: QuoteID(117) of a single Quote QuoteEntryID(299) of a Mass Quote.		
527	SecondaryExecID	N			
11	ClOrdID	N	Required when referring to orders that where electronically submitted over FIX or otherwise assigned a ClOrdID(11). In the case of quotes can be mapped to: - QuoteMsgID(1166) of a single Quote - QuoteID(117) of a Mass Quote.		
41	OrigClOrdID	N	Conditionally required for response to a Cancel or Cancel/Replace request (ExecType=PendingCancel, Replace, or Canceled) when referring to orders that where electronically submitted over FIX or otherwise assigned a ClOrdID(11). ClOrdID of the previous accepted order (NOT the initial order of the day) when canceling or replacing an order.		
583	ClOrdLinkID	N			
693	QuoteRespID	N	Required if responding to a QuoteResponse message. Echo back the Initiator's value specified in the message.		
790	OrdStatusReqID	N	Required if responding to and if provided on the Order Status Request message. Echo back the value provided by the requester.		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
584	MassStatusReqID	N	Required if responding to a Order Mass Status Request. Echo back the value provided by the requester.		
961	HostCrossID	N	Host assigned entity ID that can be used to reference all components of a cross; sides + strategy + legs		
911	TotNumReports	N	Can be used when responding to an Order Mass Status Request to identify the total number of Execution Reports which will be returned.		
912	LastRptRequested	N	Can be used when responding to an Order Mass Status Request to indicate that this is the last Execution Reports which will be returned as a result of the request.		
component block <Parties>		N	Insert here the set of "Parties" (firm identification) fields defined in "Common Components of Application Messages"		
229	TradeOriginationDate	N			
component block <ContraGrp>		N	Number of ContraBrokers repeating group instances.		
66	ListID	N	Required for executions against orders which were submitted as part of a list.		
548	CrossID	N	CrossID for the replacement order		
551	OrigCrossID	N	Must match original cross order. Same order chaining mechanism as ClOrdID/OrigClOrdID with single order Cancel/Replace.		
549	CrossType	N		Change	Add enumerator
880	TrdMatchID	N			
17	ExecID	Y	Unique identifier of execution message as assigned by sell-side (broker, exchange, ECN) (will be 0 (zero) for ExecType=I (Order Status)).		
19	ExecRefID	N	Required for Trade Cancel and Trade Correct ExecType messages		
150	ExecType	Y	Describes the purpose of the execution report.		
39	OrdStatus	Y	Describes the current state of a CHAIN of orders, same scope as OrderQty, CumQty, LeavesQty, and AvgPx		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
636	WorkingIndicator	N	For optional use with OrdStatus = 0 (New)		
103	OrdRejReason	N	For optional use with ExecType = 8 (Rejected)		
378	ExecRestatementReason	N	Required for ExecType = D (Restated).	Change	Add enumerator
1	Account	N	Required for executions against electronically submitted orders which were assigned an account by the institution or intermediary		
660	AcctIDSource	N			
581	AccountType	N	Specifies type of account	Change	Add enumerator
589	DayBookingInst	N			
590	BookingUnit	N			
591	PreallocMethod	N			
70	AllocID	N			
component block <PreAllocGrp>		N	Pre-trade allocation instructions.		
63	SettlType	N			
64	SettlDate	N	Takes precedence over SettlType value and conditionally required/omitted for specific SettleType values. Required for NDFs to specify the "value date".		
574	MatchType	N			
1115	OrderCategory	N	Defines the type of interest behind a trade (fill or partial fill)	Change	Add enumerator
544	CashMargin	N			
635	ClearingFeeIndicator	N			
component block <Instrument>		Y	Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages"		
component block <FinancingDetails>		N	Insert here the set of "FinancingDetails" (symbology) fields defined in "Common Components of Application Messages"		
component block <UndInstrmtGrp>		N	Number of underlyings		
54	Side	Y			
component block <Stipulations>		N	Insert here the set of "Stipulations" (repeating group of Fixed Income stipulations) fields defined in "Common Components of Application Messages"		
854	QtyType	N			

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
	component block <OrderQtyData>	N	Insert here the set of "OrderQtyData" fields defined in "Common Components of Application Messages" **IMPORTANT NOTE: OrderQty field is required for Single Instrument Orders unless rejecting or acknowledging an order for a CashOrderQty or PercentOrder. **		
1093	LotType	N	Defines the lot type assigned to the order.		
40	OrdType	N			
423	PriceType	N			
44	Price	N	Required if specified on the order		
1092	PriceProtectionScope	N			
99	StopPx	N	Required if specified on the order		
	component block <TriggeringInstruction>	N	Insert here the set of "TriggeringInstruction" fields defined in "common components of application messages"		
	component block <PegInstructions>	N	Insert here the set of "PegInstruction" fields defined in "Common Components of Application Messages"		
	component block <DiscretionInstructions>	N	Insert here the set of "DiscretionInstruction" fields defined in "Common Components of Application Messages"		
839	PeggedPrice	N	The current price the order is pegged at		
1095	PeggedRefPrice	N	The reference price of a pegged order.		
845	DiscretionPrice	N	The current discretionary price of the order		
847	TargetStrategy	N	The target strategy of the order		
	component block <StrategyParametersGrp>	N	Strategy parameter block		
848	TargetStrategyParameters	N	(Deprecated in FIX.5.0)For further specification of the TargetStrategy		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
849	ParticipationRate	N	(Deprecated in FIX.5.0)Mandatory for a TargetStrategy=Participate order and specifies the target participation rate. For other order types optionally specifies a volume limit (i.e. do not be more than this percent of the market volume)		
850	TargetStrategyPerformance	N	For communication of the performance of the order versus the target strategy		
15	Currency	N			
376	ComplianceID	N			
377	SolicitedFlag	N			
59	TimeInForce	N	Absence of this field indicates Day order		
168	EffectiveTime	N	Time specified on the order at which the order should be considered valid		
432	ExpireDate	N	Conditionally required if TimeInForce = GTD and ExpireTime is not specified.		
126	ExpireTime	N	Conditionally required if TimeInForce = GTD and ExpireDate is not specified.		
18	ExecInst	N	Can contain multiple instructions, space delimited.	Change	Add enumerator
1057	AggressorIndicator	N			
528	OrderCapacity	N			
529	OrderRestrictions	N		Change	Add enumerator
1091	PreTradeAnonymity	N			
582	CustOrderCapacity	N			
32	LastQty	N	Quantity (e.g. shares) bought/sold on this (last) fill. Required if ExecType = Trade or Trade Correct. If ExecType=Stopped, represents the quantity stopped/guaranteed/protected for.		
1056	CalculatedCcyLastQty	N	Used for FX trades to express the quantity or amount of the other side of the currency. Conditionally required if ExecType = Trade or Trade Correct and is an FX trade.		
1071	LastSwapPoints	N	Optionally used when ExecType = Trade or Trade Correct and is a FX Swap trade. Used to express the swap points for the swap trade event.		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
652	UnderlyingLastQty	N			
31	LastPx	N	Price of this (last) fill. Required if ExecType = Trade or Trade Correct. Should represent the "all-in" (LastSpotRate + LastForwardPoints) rate for F/X orders. ). If ExecType=Stopped, represents the price stopped/guaranteed/protected at. Not required for FX Swap when ExecType = Trade or Trade Correct as there is no "all-in" rate that applies to both legs of the FX Swap.		
651	UnderlyingLastPx	N			
669	LastParPx	N	Last price expressed in percent-of-par. Conditionally required for Fixed Income trades when LastPx is expressed in Yield, Spread, Discount or any other price type that is not percent-of-par.		
194	LastSpotRate	N	Applicable for F/X orders		
195	LastForwardPoints	N	Applicable for F/X orders		
30	LastMkt	N	If ExecType = Trade (F), indicates the market where the trade was executed. If ExecType = New (0), indicates the market where the order was routed.		
336	TradingSessionID	N			
625	TradingSessionSubID	N			
943	TimeBracket	N			
29	LastCapacity	N			
151	LeavesQty	Y	Quantity open for further execution. If the OrdStatus is Canceled, DoneForTheDay, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty - CumQty.		
14	CumQty	Y	Currently executed quantity for chain of orders.		
6	AvgPx	N	Not required for markets where average price is not calculated by the market. Conditionally required otherwise.		
424	DayOrderQty	N	For GT orders on days following the day of the first trade.		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
425	DayCumQty	N	For GT orders on days following the day of the first trade.		
426	DayAvgPx	N	For GT orders on days following the day of the first trade.		
1361	TotNoFills	N	Used to support fragmentation. Sum of NoFills across all messages with the same ExecID.		
893	LastFragment	N	Indicates whether this is the last fragment in a sequence of message fragments. Only required where message has been fragmented.		
component block <FillsGrp>		N	Specifies the partial fills included in this Execution Report		
427	GTBookingInst	N	States whether executions are booked out or accumulated on a partially filled GT order		
75	TradeDate	N	Used when reporting other than current day trades.		
60	TransactTime	N	Time the transaction represented by this ExecutionReport occurred		
113	ReportToExch	N			
component block <CommissionData>		N	Insert here the set of "CommissionData" fields defined in "Common Components of Application Messages" Note: On a fill/partial fill messages, it represents value for that fill/partial fill. On ExecType=Calculated, it represents cumulative value for the order. Monetary commission values are expressed in the currency reflected by the Currency field.		
component block <SpreadOrBenchmarkCurveData >		N	Insert here the set of "SpreadOrBenchmarkCurveData" (Fixed Income spread or benchmark curve) fields defined in "Common Components of Application Messages"		
component block <YieldData>		N	Insert here the set of "YieldData" (yield-related) fields defined in "Common Components of Application Messages"		
381	GrossTradeAmt	N			
157	NumDaysInterest	N			
230	ExDate	N			
158	AccruedInterestRate	N			

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
159	AccruedInterestAmt	N			
738	InterestAtMaturity	N	For fixed income products which pay lump-sum interest at maturity.		
920	EndAccruedInterestAmt	N	For repurchase agreements the accrued interest on termination.		
921	StartCash	N	For repurchase agreements the start (dirty) cash consideration		
922	EndCash	N	For repurchase agreements the end (dirty) cash consideration		
258	TradedFlatSwitch	N			
259	BasisFeatureDate	N			
260	BasisFeaturePrice	N			
238	Concession	N			
237	TotalTakedown	N			
118	NetMoney	N	Note: On a fill/partial fill messages, it represents value for that fill/partial fill, on ExecType=Calculated, it represents cumulative value for the order. Value expressed in the currency reflected by the Currency field.		
119	SettlCurrAmt	N	Used to report results of forex accommodation trade		
120	SettlCurrency	N	Used to report results of forex accommodation trade. Required for NDFs.		
component block <RateSource>		N			
155	SettlCurrFxRate	N	Foreign exchange rate used to compute SettlCurrAmt from Currency to SettlCurrency		
156	SettlCurrFxRateCalc	N	Specifies whether the SettlCurrFxRate should be multiplied or divided		
21	HandlInst	N			
110	MinQty	N			
1089	MatchIncrement	N			
1090	MaxPriceLevels	N			
component block <DisplayInstruction>		N	Insert here the set of "DisplayInstruction" fields defined in "common components of application messages"		
111	MaxFloor	N			
77	PositionEffect	N	For use in derivatives omnibus accounting		
210	MaxShow	N	(Deprecated in FIX.5.0)		



<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
775	BookingType	N	Method for booking out this order. Used when notifying a broker that an order to be settled by that broker is to be booked out as an OTC derivative (e.g. CFD or similar). Absence of this field implies regular booking.		
58	Text	N			
354	EncodedTextLen	N	Must be set if EncodedText field is specified and must immediately precede it.		
355	EncodedText	N	Encoded (non-ASCII characters) representation of the Text field in the encoded format specified via the MessageEncoding field.		
193	SettlDate2	N	(Deprecated in FIX.5.0)Can be used with OrdType = "Forex - Swap" to specify the "value date" for the future portion of a F/X swap.		
192	OrderQty2	N	(Deprecated in FIX.5.0)Can be used with OrdType = "Forex - Swap" to specify the order quantity for the future portion of a F/X swap.		
641	LastForwardPoints2	N	Can be used with OrdType = "Forex - Swap" to specify the forward points (added to LastSpotRate) for the future portion of a F/X swap.		
442	MultiLegReportingType	N	Default is a single security if not specified.		
480	CancellationRights	N	For CIV - Optional		
481	MoneyLaunderingStatus	N			
513	RegistID	N	Reference to Registration Instructions message for this Order.		
494	Designation	N	Supplementary registration information for this Order		
483	TransBkdTime	N	For CIV - Optional		
515	ExecValuationPoint	N	For CIV - Optional		
484	ExecPriceType	N	For CIV - Optional		
485	ExecPriceAdjustment	N	For CIV - Optional		
638	PriorityIndicator	N			
639	PriceImprovement	N			
851	LastLiquidityInd	N	Applicable only on OrdStatus of Partial or Filled.		
component block <ContAmtGrp>		N	Number of contract details in this message (number of repeating groups to follow)		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
	component block <InstrmtLegExecGrp>	N	Number of legs Identifies a Multi-leg Execution if present and non- zero.		
797	CopyMsgIndicator	N			
	component block <MiscFeesGrp>	N	Required if any miscellaneous fees are reported.		
1380	DividendYield	N			
1028	ManualOrderIndicator	N			
1029	CustDirectedOrder	N			
1030	ReceivedDeptID	N			
1031	CustOrderHandlingInst	N			
1032	OrderHandlingInstSource	N			
	component block <TrdRegTimestamps>	N			
1188	Volatility	N			
1189	TimeToExpiration	N			
1190	RiskFreeRate	N			
811	PriceDelta	N			
	StandardTrailer	Y			

## 5.2 Trade Capture Report (AE)

Tag	FieldName	Req'd	Comments	Action	Mapping Usage and Comments
StandardHeader		Y	MsgType = AE		
component block <ApplicationSequenceControl>		N			
571	TradeReportID	N	TradeReportID is conditionally required in a message-chaining model in which a subsequent message may refer to a prior message via TradeReportRefID. The alternative to a message-chain model is an entity-based model in which TradeID is used to identify a trade. In this case, TradeID is required and TradeReportID can be optionally specified.		
1003	TradeID	N			
1040	SecondaryTradeID	N			
1041	FirmTradeID	N			
1042	SecondaryFirmTradeID	N			
487	TradeReportTransType	N	Identifies Trade Report message transaction type.		
856	TradeReportType	N			
939	TrdRptStatus	N	Status of Trade Report In 3 party listed derivatives model used to convey status of a trade to a counterparty. Used specifically in a "claim" model.		
568	TradeRequestID	N	Request ID if the Trade Capture Report is in response to a Trade Capture Report Request		
828	TrdType	N			
829	TrdSubType	N		Change	Add enumerator
855	SecondaryTrdType	N			
1123	TradeHandlingInstr	N			
1124	OrigTradeHandlingInstr	N			
1125	OrigTradeDate	N	Used to preserve original trade date when original trade is being referenced in a subsequent trade transaction such as a transfer		
1126	OrigTradeID	N	Used to preserve original trade id when original trade is being referenced in a subsequent trade transaction such as a transfer		
1127	OrigSecondaryTradeID	N	Used to preserve original secondary trade id when original trade is being referenced in a subsequent trade transaction such as a transfer		
830	TransferReason	N			
150	ExecType	N	Type of Execution being		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
			reported: Uses subset of ExecType for Trade Capture Reports		
748	TotNumTradeReports	N	Number of trade reports returned - if this report is part of a response to a Trade Capture Report Request		
912	LastRptRequested	N	Indicates if this is the last report in the response to a Trade Capture Report Request		
325	UnsolicitedIndicator	N	Set to 'Y' if message is sent as a result of a subscription request or out of band configuration as opposed to a Position Request.		
263	SubscriptionRequestType	N	Used to subscribe / unsubscribe for trade capture reports. If the field is absent, the value 0 will be the default		
572	TradeReportRefID	N	The TradeReportID that is being referenced for some action, such as correction or cancelation		
881	SecondaryTradeReportRefID	N	(Deprecated in FIX.5.0)		
818	SecondaryTradeReportID	N	(Deprecated in FIX.5.0)		
820	TradeLinkID	N	Used to associate a group of trades together. Useful for average price calculations.		
880	TrdMatchID	N			
17	ExecID	N	Market (Exchange) assigned Execution Identifier		
527	SecondaryExecID	N			
378	ExecRestatementReason	N	Reason for restatement		
570	PreviouslyReported	N	Indicates if the trade capture report was previously reported to the counterparty		
423	PriceType	N	Can be used to indicate cabinet trade pricing		
549	CrossType	N		Add	Add field
component block <RootParties>		N	Insert here the set of "Root Parties" fields defined in "common components of application messages" Used for acting parties that applies to the whole message, not individual legs, sides, etc..		
1015	AsOfIndicator	N	Indicates if the trade is an outrade from a previous day.		
716	SettlSessID	N			
717	SettlSessSubID	N			
1430	VenueType	N			
1300	MarketSegmentID	N			
1301	MarketID	N			
component block <Instrument>		Y	Insert here the set of		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
			"Instrument" (symbology) fields defined in "Common Components of Application Messages"		
	component block <FinancingDetails>	N	Insert here the set of "FinancingDetails" fields defined in "Common Components of Application Messages"		
854	QtyType	N			
	component block <YieldData>	N	Insert here the set of "YieldData" fields defined in "Common Components of Application Messages"		
	component block <UndInstrmtGrp>	N			
822	UnderlyingTradingSessionID	N			
823	UnderlyingTradingSessionSubID	N			
32	LastQty	Y	Trade Quantity.		
31	LastPx	Y	Trade Price.		
1056	CalculatedCcyLastQty	N			
15	Currency	N	Primary currency of the specified currency pair. Used to qualify LastQty and GrossTradeAmount		
120	SettlCurrency	N	Contra currency of the deal. Used to qualify CalculatedCcyLastQty		
669	LastParPx	N	Last price expressed in percent-of-par. Conditionally required for Fixed Income trades when LastPx is expressed in Yield, Spread, Discount or any other price type that is not percent-of-par.		
194	LastSpotRate	N	Applicable for F/X orders		
195	LastForwardPoints	N	Applicable for F/X orders		
1071	LastSwapPoints	N			
30	LastMkt	N			
75	TradeDate	N	Used when reporting other than current day trades.		
715	ClearingBusinessDate	N			
6	AvgPx	N	Average Price - if present then the LastPx will contain the original price on the execution		
	component block <SpreadOrBenchmarkCurveData>	N	Insert here the set of "SpreadOrBenchmarkCurveData" fields defined in "Common Components of Application Messages"		
819	AvgPxIndicator	N	Average Pricing indicator		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
component block <PositionAmountData>		N	Insert here here the set of "Position Amount Data" fields defined in "Common Components of Application Messages"		
442	MultiLegReportingType	N	Type of report if multileg instrument. Provided to support a scenario for trades of multileg instruments between two parties.		
824	TradeLegRefID	N	Reference to the leg of a multileg instrument to which this trade refers Used when MultiLegReportingType = 2 (Single Leg of a Multileg security)		
component block <TrdInstrmtLegGrp>		N	Number of legs Identifies a Multi-leg Execution if present and non-zero.		
60	TransactTime	N	Time the transaction represented by this Trade Capture Report occurred. Execution Time of trade. Also describes the time of block trades.		
component block <TrdRegTimestamps>		N			
63	SettlType	N			
64	SettlDate	N	Takes precedence over SettlType value and conditionally required/omitted for specific SettlType values.		
987	UnderlyingSettlementDate	N	The settlement date for the underlying instrument of a derivatives security.		
573	MatchStatus	N			
574	MatchType	N			
component block <TrdCapRptSideGrp>		Y	Number of sides		
1188	Volatility	N			
1380	DividendYield	N			
1190	RiskFreeRate	N			
1382	CurrencyRatio	N			
797	CopyMsgIndicator	N	Indicates drop copy.		
component block <TrdRepIndicatorsGrp>		N	Number of trade reporting indicators following		
852	PublishTrdIndicator	N	(Deprecated in FIX.5.0)		
1390	TradePublishIndicator	N			
853	ShortSaleReason	N			
994	TierCode	N	Indicates the algorithm (tier) used to match a trade		
1011	MessageEventSource	N	Used to identify the event or		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
			source which gave rise to a message		
779	LastUpdateTime	N	Used to indicate reports after a specific time		
991	RndPx	N	Specifies the rounded price to quoted precision.		
1132	TZTransactTime	N			
1134	ReportedPxDiff	N	The reason(s) for the price difference should be stated by using field (Tag 828 ) TrdType and, if required, field (Tag 829) TrdSubType as well		
381	GrossTradeAmt	N	(LastQty(32) * LastPx(31) or LastParPx(669)) For Fixed Income, LastParPx(669) is used when LastPx(31) is not expressed as "percent of par" price.		
1328	RejectText	N			
1329	FeeMultiplier	N			
	StandardTrailer	Y			

### 5.3 Trade Capture Report Ack (AR)

Tag	FieldName	Req'd	Comments	Action	Mapping Usage and Comments
StandardHeader		Y	MsgType = AR		
571	TradeReportID	N	Unique identifier for the Trade Capture Report		
1003	TradeID	N			
1040	SecondaryTradeID	N			
1041	FirmTradeID	N			
1042	SecondaryFirmTradeID	N			
487	TradeReportTransType	N	Identifies Trade Report message transaction type.		
856	TradeReportType	N	Indicates action to take on trade		
828	TrdType	N			
829	TrdSubType	N		Change	Enumerator
855	SecondaryTrdType	N			
1123	TradeHandlingInstr	N			
1124	OrigTradeHandlingInstr	N			
1125	OrigTradeDate	N	Used to preserve original trade date when original trade is being referenced in a subsequent trade transaction such as a transfer		
1126	OrigTradeID	N	Used to preserve original trade id when original trade is being referenced in a subsequent trade transaction such as a transfer		
1127	OrigSecondaryTradeID	N	Used to preserve original secondary trade id when original trade is being referenced in a subsequent trade transaction such as a transfer		
830	TransferReason	N			
component block <RootParties>		N	Insert here the set of "Root Parties" (firm identification) fields defined in "common components of application messages" Range of values on report:		
150	ExecType	N	Type of Execution being reported: Uses subset of ExecType for Trade Capture Reports		
572	TradeReportRefID	N	The TradeReportID that is being referenced for some action, such as correction or cancelation		
881	SecondaryTradeReportRefID	N	(Deprecated in FIX.5.0)The SecondaryTradeReportID that is being referenced for some action, such as correction or cancelation		
939	TrdRptStatus	N	Status of Trade Report		
751	TradeReportRejectReason	N	Reason for Rejection of Trade Report		
818	SecondaryTradeReportID	N	(Deprecated in FIX.5.0)		



<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
263	SubscriptionRequestType	N	Used to subscribe / unsubscribe for trade capture reports If the field is absent, the value 0 will be the default		
820	TradeLinkID	N	Used to associate a group of trades together. Useful for average price calculations.		
880	TrdMatchID	N			
17	ExecID	N	Exchanged assigned Execution ID (Trade Identifier)		
527	SecondaryExecID	N			
378	ExecRestatementReason	N			
570	PreviouslyReported	N			
423	PriceType	N			
549	CrossType	N		Add	Add field
822	UnderlyingTradingSessionID	N			
823	UnderlyingTradingSessionSubID	N			
716	SettlSessID	N			
717	SettlSessSubID	N			
854	QtyType	N			
32	LastQty	N			
31	LastPx	N			
1430	VenueType	N			
1300	MarketSegmentID	N			
1301	MarketID	N			
component block <Instrument>		Y	Insert here the set of "Instrument" (symbology) fields defined in "Common Components of Application Messages"		
669	LastParPx	N			
1056	CalculatedCcyLastQty	N			
1071	LastSwapPoints	N			
15	Currency	N	Primary currency of the specified currency pair. Used to qualify LastQty and GrossTradeAmount		
120	SettlCurrency	N	Contra currency of the deal. Used to qualify CalculatedCcyLastQty		
194	LastSpotRate	N			
195	LastForwardPoints	N			
30	LastMkt	N			
75	TradeDate	N			
715	ClearingBusinessDate	N			
6	AvgPx	N			
819	AvgPxIndicator	N			
442	MultiLegReportingType	N			
824	TradeLegRefID	N			
60	TransactTime	N	Time ACK was issued by		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
			matching system, trading system or counterparty		
63	SettlType	N			
	component block <UndInstrmtGrp>	N			
573	MatchStatus	N			
574	MatchType	N			
797	CopyMsgIndicator	N			
	component block <TrdRepIndicatorsGrp>	N			
852	PublishTrdIndicator	N	(Deprecated in FIX.5.0)		
1390	TradePublishIndicator	N			
853	ShortSaleReason	N			
	component block <TrdInstrmtLegGrp>	N			
	component block <TrdRegTimestamps>	N			
725	ResponseTransportType	N	Ability to specify whether the response to the request should be delivered inband or via pre-arranged out-of-band transport.		
726	ResponseDestination	N	URI destination name. Used if ResponseTransportType is out-of-band.		
58	Text	N	May be used by the executing market to record any execution Details that are particular to that market		
354	EncodedTextLen	N	Must be set if EncodedText field is specified and must immediately precede it.		
355	EncodedText	N	Encoded (non-ASCII characters) representation of the Text field in the encoded format specified via the MessageEncoding field.		
1015	AsOfIndicator	N	Indicates if the trade is an outrade from a previous day		
635	ClearingFeeIndicator	N			
	component block <PositionAmountData>	N	Insert here here the set of "Position Amount Data" fields defined in "Common Components of Application Messages"		
994	TierCode	N	Indicates the algorithm (tier) used to match a trade		
1011	MessageEventSource	N	Used to identify the event or source which gave rise to a message		
779	LastUpdateTime	N	Used to indicate reports after a specific time		
991	RndPx	N	Specifies the rounded price to quoted precision.		
	component block	N			

Tag	FieldName	Req'd	Comments	Action	Mapping Usage and Comments
<TrdCapRptAckSideGrp>					
1135	RptSys	N			
381	GrossTradeAmt	N	(LastQty(32) * LastPx(31) or LastParPx(669)) For Fixed Income, LastParPx(669) is used when LastPx(31) is not expressed as "percent of par" price.		
64	SettlDate	N			
1329	FeeMultiplier	N			
StandardTrailer		Y			

## 6 Component Blocks

### 6.1 AttrbGrp

Tag	FieldName	Req'd	Comments	Action	Mapping Usage and Comments
870	NoInstrAttrib	N			
→	871	InstrAttribType	N	Change	Add enumerator
→	872	InstrAttribValue	N		

### 6.2 TrdCapRptSideGroup

Tag	FieldName	Req'd	Comments	Action	Mapping Usage and Comments
552	NoSides	Y			
→	54	Side	Y		
→	1427	SideExecID	N		This refers to the ExecID of the execution being reported. Used in trade reporting models utilizing different execution IDs for each side of the trade. This is used when reporting a trade with two or more sides.
→	1428	OrderDelay	N		
→	1429	OrderDelayUnit	N		Used in conjunction with OrderDelay to specify the time unit being expressed. Default is "seconds" if not specified.
→	component block <Parties>		N		Insert here the set of "Parties" fields defined in "Common Components of Application Messages"
→	1	Account	N		
→	660	AcctIDSource	N		
→	581	AccountType	N		
→	81	ProcessCode	N		
→	575	OddLot	N		(Deprecated in FIX.5.0)
→	component block <ClrInstGrp>		N		

<i>Tag</i>	<i>FieldName</i>		<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
→	578	TradeInputSource	N			
→	579	TradeInputDevice	N			
→	376	ComplianceID	N			
→	377	SolicitedFlag	N			
→	582	CustOrderCapacity	N			
→	336	TradingSessionID	N	Generally the same for all sides of a trade, if reported only on the first side the same TradingSessionID will apply to all sides of the trade		
→	625	TradingSessionSubID	N	Generally the same for all sides of a trade, if reported only on the first side the same TradingSessionSubID will apply to all sides of the trade.		
→	943	TimeBracket	N			
→	430	NetGrossInd	N	Code to represent whether value is net (inclusive of tax) or gross.		
→	1154	SideCurrency	N	Used to Identify the Currency of the Trade Report Side.		
→	1155	SideSettlCurrency	N	Used to Identify the Settlement Currency of the Trade Report Side.		
→	component block <CommissionData>		N	Insert here here the set of "Commission Data" fields defined in "Common Components of Application Messages"		
→	157	NumDaysInterest	N			
→	230	ExDate	N			
→	158	AccruedInterestRate	N			
→	159	AccruedInterestAmt	N			
→	738	InterestAtMaturity	N			
→	920	EndAccruedInterestAmt	N			
→	921	StartCash	N			
→	922	EndCash	N			
→	238	Concession	N			
→	237	TotalTakedown	N			
→	118	NetMoney	N			
→	119	SettlCurrAmt	N			
→	155	SettlCurrFxRate	N			
→	156	SettlCurrFxRateCalc	N			
→	77	PositionEffect	N			
→	752	SideMultiLegReportingType	N			
→	component block <ContAmtGrp>		N			
→	component block		N	Insert here here the set of		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
	<Stipulations>		"Stipulations" fields defined in "Common Components of Application Messages"		
→	component block <MiscFeesGrp>	N			
→	825 ExchangeRule	N			
→	component block <SettlDetails>	N	Conveys settlement account details reported as part of obligation		
→	826 TradeAllocIndicator	N			
→	591 PreallocMethod	N			
→	70 AllocID	N			
→	component block <TrdAllocGrp>	N			
→	1072 SideGrossTradeAmt	N			
→	1057 AggressorIndicator	N			
→	1009 SideLastQty	N			
→	1005 SideTradeReportID	N			
→	1006 SideFillStationCd	N			
→	1007 SideReasonCd	N			
→	83 RptSeq	N			
→	1008 SideTrdSubType	N		Change	Add enumerator
→	1115 OrderCategory	N		Change	Add enumerator
→	component block <TradeReportOrderDetail>	N	Details of the order associated with this side of the trade.		
→	component block <SideTrdRegTS>	N			

### 6.3 TrdRegTimestamps

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
768	NoTrdRegTimestamps	N			
→	769 TrdRegTimestamp	N	Required if NoTrdRegTimestamps > 1		
→	770 TrdRegTimestampType	N	Required if NoTrdRegTimestamps > 1	Change	Add enumerator
→	771 TrdRegTimestampOrigin	N			
→	1033 DeskType	N	Type of Trading desk		
→	1034 DeskTypeSource	N			
→	1035 DeskOrderHandlingInstructions	N			

## 6.4 SideTrdRegTS

Tag	FieldName		Req'd	Comments	Action	Mapping Usage and Comments
1016	NoSideTrdRegTS		N			
→	1012	SideTrdRegTimestamp	N			
→	1013	SideTrdRegTimestamp Type	N		Change	Add enumerator
→	1014	SideTrdRegTimestamp Src	N			

## 6.5 TradeReportOrderDetail

Tag	FieldName		Req'd	Comments	Action	Mapping Usage and Comments
37	OrderID		N			
198	SecondaryOrderID		N			
11	ClOrdID		N	In the case of quotes can be mapped to QuoteMsgID(1166) of a single Quote(MsgType=S) or QuoteID(117) of a MassQuote(MsgType=i).		
526	SecondaryClOrdID		N	In the case of quotes can be mapped to QuoteID(117) of a single Quote(MsgType=S) or QuoteEntryID(299) of a MassQuote(MsgType=i).		
66	ListID		N			
1080	RefOrderID		N	Some hosts assign an order a new order id under special circumstances. The RefOrdID field will connect the same underlying order across changing OrderIDs.		
1081	RefOrderIDSource		N			
1431	RefOrdIDReason		N	The reason for updating the RefOrdID		
1091	PreTradeAnonymity		N		Add	Add field
40	OrdType		N	Order type from the order associated with the trade		
44	Price		N	Order price at time of trade		
99	StopPx		N	Stop/Limit order price		
18	ExecInst		N	Execution Instruction from the order associated with the trade	Change	Add enumerators
39	OrdStatus		N	Status of order as of this trade report		
component block <OrderQtyData>			N	Order quantity at time of trade		
151	LeavesQty		N			
14	CumQty		N			
59	TimeInForce		N			
126	ExpireTime		N	The order expiration		

<i>Tag</i>	<i>FieldName</i>	<i>Req'd</i>	<i>Comments</i>	<i>Action</i>	<i>Mapping Usage and Comments</i>
			date/time in UTC		
component block <DisplayInstruction>		N			
528	OrderCapacity	N			
529	OrderRestrictions	N		Change	Add enumerators
775	BookingType	N			
1432	OrigCustOrderCapacity	N			
821	OrderInputDevice	N			
1093	LotType	N			
483	TransBkdTime	N			
586	OrigOrdModTime	N			

## 7 Appendix A - Data Dictionary

<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
18	ExecInst	Change	MultipleCharacterField	<p>Instructions for order handling on exchange trading floor. If more than one instruction is applicable to an order, this field can contain multiple instructions separated by space. *** SOME VALUES HAVE BEEN REPLACED - See "Replaced Features and Supported Approach" *** (see Volume : "Glossary" for value definitions)</p> <p>Valid values:</p> <p>0 = Stay on offer side            9 = Stay on bid side            A = No cross (cross is forbidden)            B = OK to cross            C = Call first            D = Percent of volume (indicates that the sender does not want to be all of the volume on the floor vs. a specific percentage)            E = Do not increase - DNI            F = Do not reduce - DNR            G = All or none - AON            H = Reinstate on system failure (mutually exclusive with Q and l)            I = Institutions only            l = Not held            J = Reinstate on Trading Halt (mutually exclusive with K and m)            K = Cancel on Trading Halt (mutually exclusive with J and m)            L = Last peg (last sale)            M = Mid-price peg (midprice of inside quote)            N = Non-negotiable            O = Opening peg            P = Market peg</p>		



<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
				Q = Cancel on system failure (mutually exclusive with H and I) R = Primary peg (primary market - buy at bid/sell at offer) S = Suspend 2 = Work T = Fixed Peg to Local best bid or offer at time of order U = Customer Display Instruction (Rule 11Ac1-1/4) V = Netting (for Forex) W = Peg to VWAP X = Trade Along Y = Try To Stop Z = Cancel if not best a = Trailing Stop Peg b = Strict Limit (No price improvement) c = Ignore Price Validity Checks 3 = Go along d = Peg to Limit Price e = Work to Target Strategy f = Intermarket Sweep g = External Routing Allowed h = External Routing Not Allowed i = Imbalance Only j = Single execution requested for block trade k = Best Execution l = Suspend on system failure (mutually exclusive with H and Q) m = Suspend on Trading Halt (mutually exclusive with J and K) 4 = Over the day n = Reinstate on connection loss (mutually exclusive with o and p) o = Cancel on connection loss (mutually exclusive with n and p)		

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				<p>p = Suspend on connection loss (mutually exclusive with n and o)</p> <p>q = Release from suspension (mutually exclusive with S)</p> <p>r = Execute as delta neutral using volatility provided</p> <p>s = Execute as duration neutral</p> <p>t = Execute as FX neutral</p> <p>5 = Held</p> <p>6 = Participant don't initiate</p> <p>7 = Strict scale</p> <p>8 = Try to scale</p> <p>u = Minimum Guaranteed Fill Eligible</p> <p>v = Bypass Non-Displayed Liquidity</p>		
378	ExecRestatementReason	Change	Int	<p>Code to identify reason for an ExecutionRpt message sent with ExecType=Restated or used when communicating an unsolicited cancel.</p> <p>Valid values:</p> <p>0 = GT corporate action</p> <p>1 = GT renewal / restatement (no corporate action)</p> <p>2 = Verbal change</p> <p>3 = Repricing of order</p> <p>4 = Broker option</p> <p>5 = Partial decline of OrderQty (e.g. exchange initiated partial cancel)</p> <p>6 = Cancel on Trading Halt</p> <p>7 = Cancel on System Failure</p> <p>8 = Market (Exchange) option</p> <p>9 = Canceled, not best</p> <p>10 = Warehouse Recap</p> <p>11 = Peg Refresh</p> <p>99 = Other</p> <p>14 = Assign Time Priority</p>		
529	OrderRestrictions	Change	MultipleC	Restrictions associated with an order. If more		

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
			harField	than one restriction is applicable to an order, this field can contain multiple instructions separated by space. Valid values: 1 = Program Trade A = Riskless Arbitrage B = Issuer Holding C = Issue Price Stabilization D = Non-algorithmic E = Algorithmic 2 = Index Arbitrage 3 = Non-Index Arbitrage 4 = Competing Market Maker 5 = Acting as Market Maker or Specialist in the security 6 = Acting as Market Maker of Specialist in the underlying security of a derivative security 7 = Foreign Entity (of foreign government or regulatory jurisdiction) 8 = External Market Participant 9 = External Inter-connected Market Linkage <b>G = Insider Account</b> <b>H = Significant Shareholder</b> <b>I = Normal Course Issuer Bid (NCIB)</b>		
549	CrossType	Change	Int	Type of cross being submitted to a market. Valid values: 1 = Cross AON - cross trade which is executed complete or not. Both sides are treated in the same manner. This is equivalent to an "All or None". 2 = Cross IOC - cross trade which is executed partially and the rest is cancelled. One side is fully executed, the other side is partially executed with the remainder being cancelled. This is equivalent to an IOC on the other side.		Add to Trade Capture Report and Trade Capture Report Ack messages

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				<p>Note: CrossPrioritization (550) field may be used to indicate which side should fully execute in this scenario.</p> <p>3 = Cross One Side - cross trade which is partially executed with the unfilled portions remaining active.. One side of the corss is fully executed (as denoted by the CrossPrioritization (550) field), but the unfilled portion remains active.</p> <p>4 = Cross Same Price - cross trade is executed with existing orders with the same price. In this case other orders exist with the same price, the quantity of the Cross is executed against the existing orders and quotes, the remainder of the corss is executed against the other side of the cross. The two sides potentially have different quantities.</p> <p>5 = Basis Cross(A trade where a basket of securities or an index participation unit is transacted at prices achieved through the execution of related exchange-traded derivative instruments in an amount that will correspond to an equivalent market exposure)</p> <p>6 = Contingent Cross (A cross resulting from a paired order placed by a Participant to execute an order on a security that is contingent on the execution of a second order for an offsetting volume of a related security)</p> <p>7 = VWAP Cross (A cross for the purpose of executing a trade at a volume-weighted average price of a security traded for a continuous period on or during a trading day)</p>		

<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
				8 = STS Cross (A closing price cross resulting from an order placed by a Participant for execution in a Special Trading Session at the last sale price)		
581	AccountType	Change	Int	Type of account associated with an order Valid values: 1 = Account is carried on customer side of the books 2 = Account is carried on non-customer side of books 3 = House Trader 4 = Floor Trader 6 = Account is carried on non-customer side of books and is cross margined 7 = Account is house trader and is cross margined 8 = Joint back office account (JBO)  9 = Equities specialist 10 = Options market maker 11 = Options firm account		
770	TrdRegTimestampType	Change	Int	Traded / Regulatory timestamp type. Note of Applicability: values are required in US futures markets by the CFTC to support computerized trade reconstruction. (see Volume : "Glossary" for value definitions) Valid values: 1 = Execution Time 2 = Time In 3 = Time Out 4 = Broker Receipt 5 = Broker Execution 6 = Desk Receipt 8 = Time Priority		

<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
871	InstrAttribType	Change	Int	<p>Code to represent the type of instrument attribute.</p> <p>Valid values:</p> <p>1 = Flat (securities pay interest on a current basis but are traded without interest)</p> <p>2 = Zero coupon</p> <p>3 = Interest bearing (for Euro commercial paper when not issued at discount)</p> <p>4 = No periodic payments</p> <p>5 = Variable rate</p> <p>6 = Less fee for put</p> <p>7 = Stepped coupon</p> <p>8 = Coupon period (if not semi-annual). Supply redemption date in the InstrAttribValue (872) field.</p> <p>9 = When [and if] issued</p> <p>10 = Original issue discount</p> <p>11 = Callable, puttable</p> <p>12 = Escrowed to Maturity</p> <p>13 = Escrowed to redemption date - callable. Supply redemption date in the InstrAttribValue (872) field</p> <p>14 = Pre-refunded</p> <p>15 = In default</p> <p>16 = Unrated</p> <p>17 = Taxable</p> <p>18 = Indexed</p> <p>19 = Subject To Alternative Minimum Tax</p> <p>20 = Original issue discount price. Supply price in the InstrAttribValue (872) field</p> <p>21 = Callable below maturity value</p> <p>22 = Callable without notice by mail to holder unless registered</p> <p>23 = Price tick rules for security.</p> <p>24 = Trade type eligibility details for security.</p>		

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				25 = Instrument Denominator 26 = Instrument Numerator 27 = Instrument Price Precision 28 = Instrument Strike Price 29 = Tradeable Indicator 99 = Text. Supply the text of the attribute or disclaimer in the InstrAttribValue (872) field. 30 = Instrument is eligible to accept anonymous orders 31 = Minimum Guaranteed Fill Volume		
829	TrdSubType	Change	Int	Used on a multi-sided trade to specify the type of trade for a given side Valid values: 0 - CMTA 1 - Internal transfer or adjustment 2 - External transfer or transfer of account 3 - Reject for submitting side 4 - Advisory for contra side 5 - Offset due to an allocation 6 - Onset due to an allocation 7 - Differential spread 8 - Implied spread leg executed against an outright 9 - Transaction from exercise 10 - Transaction from assignment 11 - ACATS 33 - Off Hours Trade 34 - On Hours Trade 35 - OTC Quote 36 - Converted SWAP MiFID Values 14 - AI (Automated input facility disabled in response to an exchange request.) 15 - B (Transaction between two member firms where neither member firm is		

<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
				<p>registered as a market maker in the security in question and neither is a designated fund manager. Also used by broker dealers when dealing with another broker which is not a member firm. Non-order book securities only.)</p> <p>16 - K (Transaction using block trade facility.)</p> <p>17 - LC (Correction submitted more than three days after publication of the original trade report.)</p> <p>18 - M (Transaction, other than a transaction resulting from a stock swap or stock switch, between two market makers registered in that security including IDB or a public display system trades. Non-order book securities only.)</p> <p>19 - N (Non-protected portfolio transaction or a fully disclosed portfolio transaction)</p> <p>20 - NM ( i) transaction where Exchange has granted permission for non-publication                      ii)IDB is reporting as seller                      iii) submitting a transaction report to the Exchange, where the transaction report is not also a trade report.)</p> <p>21 - NR (Non-risk transaction in a SEATS security other than an AIM security)</p> <p>22 - P (Protected portfolio transaction or a worked principal agreement to effect a portfolio transaction which includes order book securities)</p> <p>23 - PA (Protected transaction notification)</p> <p>24 - PC (Contra trade for transaction which took place on a previous day and which was automatically executed on the Exchange</p>		



<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
				trading system) 25 - PN (Worked principal notification for a portfolio transaction which includes order book securities) 26 - R ( (i) riskless principal transaction between non-members where the buying and selling transactions are executed at different prices or on different terms (requires a trade report with trade type indicator R for each transaction) (ii) market maker is reporting all the legs of a riskless principal transaction where the buying and selling transactions are executed at different prices (requires a trade report with trade type indicator R for each transaction)or (iii) market maker is reporting the onward leg of a riskless principal transaction where the legs are executed at different prices, and another market maker has submitted a trade report using trade type indicator M for the first leg (this requires a single trade report with trade type indicator R.) 27 - RO (Transaction which resulted from the exercise of a traditional option or a stock-settled covered warrant) 28 - RT (Risk transaction in a SEATS security, (excluding AIM security) reported by a market maker registered in that security) 29 - SW (Transactions resulting from stock swap or a stock switch (one report is required for each line of stock)) 30 - T (If reporting a single protected transaction) 31 - WN (Worked principal notification for a single order book security) 32 - WT (Worked principal transaction (other than a portfolio transaction))		

<i>Tag</i>	<i>Field Name</i>	<i>Action</i>	<i>Data type</i>	<i>Description</i>	<i>FIXML Abbreviation</i>	<i>Add to / Deprecate from Message type or Component block</i>
				37 - Crossed Trade (X) 38 - Interim Protected Trade (I) 39 - Large in Scale (L) 40 = Wash Trade		
1008	SideTrdSubType	Change	Int			(Same as 829)
1013	SideTrdRegTimestampType	Change	Int			(Same as 770)
1091	PreTradeAnonymity	Add	Boolean	Allows trader to explicitly request anonymity or disclosure in pre-trade market data feeds. Anonymity is relevant in markets where counterparties are regularly disclosed in order depth feeds. Disclosure is relevant when counterparties are not normally visible		Add to TradeReportOrderDetail Component Block
1115	OrderCategory	Change	Int	Defines the type of interest behind a trade (fill or partial fill). Valid values: 1 = Order 2 = Quote 3 = Privately Negotiated Trade 4 = Multileg order 5 = Linked order 6 = Quote Request 7 = Implied Order 8 = Cross Order 9 = Streaming price (quote) A = Internal Cross Order		

## 8 Appendix B - Glossary Entries

<b>Term</b>	<b>Definition</b>	<b>Field where used</b>
Assign Time Priority	Used when the Market manually assigns a time priority to an order	ExecRestatementReason (378)
Time Priority	A timestamp manually assigned by a market to specify time priority for an order	TrdRegTimestampType(770),

		SideTrdRegTimeStamp (1013)
Wash Trade	A trade that has occurred between proprietary accounts of the same Member firm	SideTrdSubType (1008)
Minimum Guaranteed Fill	Indicates than an order is eligible for Minimum Guaranteed Fill	OrderRestrictions (529)
Basis Cross	A trade where a basket of securities or an index participation unit is transacted at prices achieved through the execution of related exchange-traded derivative instruments in an amount that will correspond to an equivalent market exposure	CrossType (549)
Contingent Cross	A cross resulting from a paired order placed by a Participant to execute an order on a security that is contingent on the execution of a second order for an offsetting volume of a related security	CrossType (549)
VWAP Cross	A cross for the purpose of executing a trade at a volume-weighted average price of a security traded for a continuous period on or during a trading day	CrossType (549)
STS Cross	A closing price cross resulting from an order placed by a Participant for execution in a Special Trading Session at the last sale price	CrossType (549)
Accept Anonymous	Instrument is eligible to accept anonymous orders	InstAttribType (871)
Normal Course Issuer Bid	The action of a company buying back its own outstanding shares from the markets so it can cancel them	OrderRestrictions (529)
Internal Cross Order	An intentional cross between two client accounts of a Participant which are managed by a single firm acting as a portfolio manager with discretionary authority obtained from both clients	OrderCategory (1115)
Bypass Non-Displayed Liquidity	An order to fill against visible (disclosed) volume only	ExecInst (18)
Insider Account	An account held by a person considered to be an "Insider" under the definition of the appropriate regulatory body	OrderRestrictions (529)
Significant Shareholder	An account held by a person considered to be a "Significant Shareholder" under the definition of the appropriate regulatory body	OrderRestrictions (529)

## 9 Appendix C – Volume 7 Additions

User Group: Exchanges and Markets, Order Handling and Instructions Semantics, Canadian UMIR Usage

Field Name	Field	UMIR	Applicable FIX Values	FIX to UMIR Mapping Notes
AccountType	581	Type of trading account.  Non-client Client Equities Specialist Options market maker Options firm account Inventory	1 = Account is carried on customer side of the books 2 = Account is carried on non-customer side of books 3 = House trader 9 = Equities specialist 10 = Options market maker 11 = Options firm account	1 = Client 2 = Non Client 3 = Inventory
CrossType	549	Type of cross.  Valid values: Basis Contingent VWAP STS	5 = Basis Cross (A trade where a basket of securities or an index participation unit is transacted at prices achieved through the execution of related exchange-traded derivative instruments in an amount that will correspond to an equivalent market exposure)  6 = Contingent Cross (A cross resulting from a paired order placed by a Participant to execute an order on a security that is contingent on the execution of a second order for an offsetting volume of a related security)  7 = VWAP Cross (A cross for the purpose of executing a trade at a volume-weighted average price of a security traded for a continuous period on or during a trading day)  8 = STS Cross (A closing price cross resulting from an order placed by a Participant for execution in a Special Trading Session at the last sale price)	Note: UMIR definitions of the following fields are more specific:  6 = Contingent Cross (A cross resulting from a paired order placed by a Participant to execute an order on a security that is contingent on the execution of a second order for an offsetting volume of a related security)  8 = STS Cross (A closing price cross resulting from an order placed by a Participant for execution in a Special Trading Session at the last sale price)