Global Exchanges and Markets Committee

HKEx Trade Extensions

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Table of Contents

Table of Figures

Document History

Revision	Date	Author	Revision Comments
0.1	2 March, 2011	Kenneth To (HKEx)	1st draft
0.2	24 March, 2011	Kenneth To (HKEx)	Revise after receiving comments from GExMC meeting on 21 March. Remove proposed new enumeration “Auction” for MatchType(574) Remove proposed new field “Internalized” for ExecutionReoprt(35=8) and TradeCaptureReport(35=AE). Fill in Chapter 5 and Appendix A.
0.3	13 April, 2011	Kenneth To (HKEx)	Revise after receiving comments from GExMC meeting on 4 April. Move the RejectText field and the encoded fields right after the reason code fields in Chapter 5.
0.4	May 2, 2011	FPL	Editted with resolution from GTC meeting regarding RejectText. Prepared for public comment period.
As Built	2011-09-05	Jim N	As Built
	2011-12-26	Lisa T	Replaced TBD with assigned enum values. Minor edit to enum description in DD to use sentence case.
	2012-02-04	R. Shriver	Revised enum descriptions and elaborations for ExecInst(18) per guidelines.

1 Introduction

HKEx finds few gaps for FIX trade messages such as New Order Single, Execution Report and Order Cancel Reject to cope with existing HKEx equity market trading practices. To fill in the gaps, HKEx requests adding tags and enumerations to the trade messages:

- New enumeration "**Ignore Notional Value Checks**" for field ExecInst(18) to convey if notional value should be checked for order submission.
- New enumerations "**Reference price not available**" and "**Notional value exceeds threshold**" for field OrdRejReason(103) to support price and notional value check.
- Existing field **RejectText(1328), EncodedRejectTextLen** (1664) and **EncodedRejectText** (1665) for messages ExecutionReport(35=8), OrderCancelReject(35=9), TradeCaptureReportAck(35=AR) and QuoteStatusReport(35=AI) to convey reject text.

2 Business Workflow

2.1 Price and Notional Value Check

HKEx will perform price and/or notional value check for the orders submitted by the broker. The broker must indicate in the New Order Single that the order should be checked against price band and/or against the notional value threshold or no checking required. The field ExecInst(18) (value c=Ignore Price Validity Checks) can be used for the price check purpose but additional enumeration for notional value check is needed. Absence of these values in ExecInst(18) means price and/or notional value check is required.

Proposed new enumeration for ExecInst(18):
- "Ignore Notional Value Checks" (~~TBD~~x)

HKEx will reject the order with appropriate OrdRejReason(103) in the Execution Report if it fails either price validation check or the notional value check.

OrdRejReason (value=16 - Price exceeds current price band Price) will be returned if the order price exceeds the current price band which is a pre-defined price ticks away from the current reference price. However, reference price may not be available to check against (e.g. on the listing day of a new IPO stock which has no previous closing price for reference) and HKEx will reject with OrdRejReason="Reference price not available(~~TBD~~19)" if price validation check is required.

If the notional value (shares x price per share) check fails, HKEx will reject with OrdRejReason="Notional value exceeds threshold (~~TBD~~20)" if notional value check is required.

Two new enumerations are proposed to add for OrdRejReason(103) to convey the reject reason due to the price and notional value check:
- "Reference price not available" (~~TBD~~19)
- "Notional value exceeds threshold" (~~TBD~~20)

Note: The proposed new enumerations for the ExecInst(18) and OrdRejReason(103) are also applicable to the other messages that use these two fields. For example, HKEx will also apply the field ExecInst(18) which is part of the component block TradeReportOrderDetail of the TradeCaptureReport(35=AE) message for Trade Capture function.

2.2 Addition of RejectText(1328) to Execution Report

HKEx allows broker to input broker reference text (a free text) during order input and the broker reference text will be echoed back in the Execution Report. However, use of field Text(58) as broker reference in the New Single Order and echoing back in the Execution Report may be problematic since it also requires Text field in the Execution Report for the reject text for order rejection.

To free up the field Text(58) in the Execution Report for echoing back the broker reference (in the Text field) specified by the broker in the order, it is proposed to add the existing field RejectText(1328) to the Execution Report. The RejectText field should also be added to the other appropriate response messages (OrderCancelReject(35=9), TradeCaptureReportAck(35=AR), QuoteStatusReport(35=AI)) to substantiate the reject reason. The corresponding encoded Reject Text is also proposed to be added to same messages for completeness.

Three fields are proposed to be added to ExecutionReport(35=8), OrderCancelReject(35=9), TradeCaptureReportAck(35=AR), QuoteStatusReport(35=AI):

- RejectText(1328)
- EncodedRejectTextLen(1664)
- EncodedRejectText(1665)

3 Issues and Discussion Points

3.1 Reject Text (1328) versus Text (58)

The Text (58) field can be a persistent attribute of an entity (e.g. order, quote, trade) or a temporary attribute of a request (e.g. RequestForPositions) or response (e.g. RequestForPositionsAck). In case of responses the purpose of the Text(58) is not always entirely clear, e.g. should Text (58) in the TCRAck message echo the text attribute of the trade as conveyed in the TCR field Text (58) or should Text (58) in the TCRAck message provide further information about the acknowledgement (positive or negative)?

Some fields such as PosReqResult (728) explicitly reference Text (58) as the field to contain an explanation. Known usages of the Text (58) field as an attribute of an entity, e.g. to convey a broker reference, could also be covered by adding an explicit field rather than using the generic field. However, there is likely to always be a need for a generic text field, i.e. the underlying problem will remain.

The initial conclusion is that

a) Text (58) in ExecutionReport and QuoteStatusReport represent attributes of the order or quote;
b) Text (58) in OrderCancelReject and TCRAck is related to the response only and should be used to explain rejection reasons if needed.

The final conclusion should be documented in the new FIXwiki.

Further discussion in the GExMC on Apr 4 did not lead to a complete resolution of the issue. From above a) was confirmed, i.e. Text(58) as entity attribute of report (possibly unsolicited) messages. Resolution will needed in a wider discussion on the GTC level. It was pointed out that the resolution might need to be applied to additional messages, for example DontKnowTrade.

One of the options for b) is to add RejectText to these messages as well and to have the user check for its existence first when looking for rejection reasons, followed by a lookup of the Text field. Newer applications might choose to only use RejectText for this purpose to be semantically clearer. It was agreed that it is not an option to replace Text with RejectText to avoid impact on older applications that have always used Text to convey rejection reasons.

It was also discussed whether RejectText could become part of the envisaged Business Application Header which would be part of every message. This would create a problem for request messages where such a field has no meaning. The question was raised whether this would justify having two types of headers (for requests and responses). It was pointed out that ISO 20022 already has such a header but only a single one. Furthermore, ISO has very lightweight status messages as responses to requests which only carry referential information to tie it back to the request.

A minor change was agreed relating to the position of the RejectText fields in the message. They should not follow the generic Text fields but the field conveying the rejection code, for example OrdRejReason in the ExecutionReport message.

GTC April 21, 2011, meeting: It was concluded that for the purpose of this proposal that the RejectText field along with the associated EncodedRejectText and EncodedRejectTextLen be added to the OrderCancelReject and TradeCaptureReportAck messages as well. It was also suggested that text be included for the Specification that RejectText should be used to convey additional rejection reasons, while the Text field may be used to echo back information from the initiating message.

A separate gap analysis will be conducted by the GTC technical team to determine which other messages should include the RejectText fields.

4 Proposed Message Flow

There is no change to existing message flow.

5 FIX message tables

5.1 Execution Report

Tag	*FieldName*	*Req'd*	*ICR*	*Action*	*Mappings and Usage Comments*	*FIX Spec 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.
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				
880	TrdMatchID	N				
17	ExecID	Y				Unique identifier of execution message as assigned by sell-side (broker, exchange, ECN) (will be 0 (zero) forExecType=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
636	WorkingIndicator	N				For optional use with OrdStatus = 0 (New)
103	OrdRejReason	N				For optional use with ExecType = 8 (Rejected)
1328	RejectText	N		Add		Reason description for rejecting the transaction request.
1664	EncodedRejectTextLen	N		Add		Must be set if EncodedRejectText(1665) field is specified and must immediately precede it.
1665	EncodedRejectText	N		Add		Encoded (non-ASCII characters) representation of the RejectText(1328) field in the encoded format specified

							via the MessageEncoding(347) field.
378	ExecRestatementReason	N					Required for ExecType = D (Restated).
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
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					
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					
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				
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
849	ParticipationRate	N				(Deprecated in FIX.5.0)Mandatory for a TargetStrategy=Participate order and specifies the target particpation 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.
1057	AggressorIndicator	N				
528	OrderCapacity	N				
529	OrderRestrictions	N				
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.
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.
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				
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 accomodation 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)
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)
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 Order Cancel Reject

Tag	*FieldName*	*Req'd*	*ICR*	*Action*	*Mappings and Usage Comments*	*FIX Spec Comments*
StandardHeader		Y				MsgType = 9
37	OrderID	Y				If CxlRejReason="Unknown order", specify "NONE".
198	SecondaryOrderID	N				Can be used to provide order id used by exchange or executing system.
526	SecondaryClOrdID	N				
11	ClOrdID	Y				Unique order id assigned by institution or by the intermediary with closest association with the investor. to the cancel request or to the replacement order.
583	ClOrdLinkID	N				
41	OrigClOrdID	N				ClOrdID(11) which could not be canceled/replaced. ClOrdID of the previous accepted order (NOT the initial order of the day) when

						canceling or replacing an order. Required when referring to orders that where electronically submitted over FIX or otherwise assigned a ClOrdID.
39	OrdStatus	Y				OrdStatus value after this cancel reject is applied. If CxlRejReason = "Unknown Order", specify Rejected.
636	WorkingIndicator	N				For optional use with OrdStatus = 0 (New)
586	OrigOrdModTime	N				
66	ListID	N				Required for rejects against orders which were submitted as part of a list.
1	Account	N				
660	AcctIDSource	N				
581	AccountType	N				
229	TradeOriginationDate	N				
75	TradeDate	N				
60	TransactTime	N				
434	CxlRejResponseTo	Y				
102	CxlRejReason	N				
1328	RejectText	N		Add		Reason description for rejecting the transaction request.
1664	EncodedRejectTextLen	N		Add		Must be set if EncodedRejectText(1665) field is specified and must immediately precede it.
1665	EncodedRejectText	N		Add		Encoded (non-ASCII characters) representation of the RejectText (1328)field in the encoded format specified via the MessageEncoding(347) field.
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.
StandardTrailer		Y				

5.3 Quote Status Report

Tag	*FieldName*	*Req'd*	*ICR*	*Action*	*Mappings and Usage Comments*	*FIX Spec Comments*
StandardHeader		Y				MsgType = AI
649	QuoteStatusReqID	N				
131	QuoteReqID	N				Required when quote is in response to a Quote Request message
117	QuoteID	N				Maps to QuoteID(117) of a single Quote(MsgType=S) or QuoteEntryID(299) of a MassQuote(MsgType=i).
1166	QuoteMsgID	N				Maps to QuoteMsgID(1166) of a single Quote(MsgType=S) or QuoteID(117) of a MassQuote(MsgType=i).
693	QuoteRespID	N				Required when responding to a Quote Response message.
537	QuoteType	N				Quote Type If not specified, the default is an indicative quote
298	QuoteCancelType	N				
component block <Parties>		N				Insert here the set of "Parties" (firm identification) fields defined in "Common Components of Application Messages"
component block <TargetParties>		N				Can be populated with the values provided on the associated QuoteStatusRequest(MsgType=A).
336	TradingSessionID	N				
625	TradingSessionSubID	N				
component block <Instrument>		N				Conditionally required when reporting status of a single security quote.
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	N				
component block <OrderQtyData>		N				Required for Tradeable quotes of single instruments
63	SettlType	N				
64	SettlDate	N				Can be used with forex

						quotes to specify a specific "value date"
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.
15	Currency	N				Can be used to specify the currency of the quoted prices. May differ from the 'normal' trading currency of the instrument being quoted
component block <Stipulations>		N				
1	Account	N				
660	AcctIDSource	N				
581	AccountType	N				Type of account associated with the order (Origin)
component block <LegQuotStatGrp>		N				Required for multileg quote status reports
component block <QuotQualGrp>		N				
126	ExpireTime	N				
44	Price	N				
423	PriceType	N				
component block <SpreadOrBenchmarkCurveData>		N				
component block <YieldData>		N				
132	BidPx	N				If F/X quote, should be the "all-in" rate (spot rate adjusted for forward points). Note that either BidPx, OfferPx or both must be specified.
133	OfferPx	N				If F/X quote, should be the "all-in" rate (spot rate adjusted for forward points). Note that either BidPx, OfferPx or both must be specified.
645	MktBidPx	N				Can be used by markets that require showing the current best bid and offer
646	MktOfferPx	N				Can be used by markets that require showing the current best bid and offer
647	MinBidSize	N				Specifies the minimum bid size. Used for markets that use a minimum and

						maximum bid size.
134	BidSize	N				Specifies the bid size. If MinBidSize is specified, BidSize is interpreted to contain the maximum bid size.
648	MinOfferSize	N				Specifies the minimum offer size. If MinOfferSize is specified, OfferSize is interpreted to contain the maximum offer size.
135	OfferSize	N				Specified the offer size. If MinOfferSize is specified, OfferSize is interpreted to contain the maximum offer size.
110	MinQty	N				
62	ValidUntilTime	N				
188	BidSpotRate	N				May be applicable for F/X quotes
190	OfferSpotRate	N				May be applicable for F/X quotes
189	BidForwardPoints	N				May be applicable for F/X quotes
191	OfferForwardPoints	N				May be applicable for F/X quotes
631	MidPx	N				
632	BidYield	N				
633	MidYield	N				
634	OfferYield	N				
60	TransactTime	N				
40	OrdType	N				Can be used to specify the type of order the quote is for
642	BidForwardPoints2	N				(Deprecated in FIX.5.0)Bid F/X forward points of the future portion of a F/X swap quote added to spot rate. May be a negative value
643	OfferForwardPoints2	N				(Deprecated in FIX.5.0)Offer F/X forward points of the future portion of a F/X swap quote added to spot rate. May be a negative value
656	SettlCurrBidFxRate	N				Can be used when the quote is provided in a currency other than the instrument's 'normal' trading currency. Applies to all bid prices contained in this message
657	SettlCurrOfferFxRate	N				Can be used when the quote is provided in a currency other than the instrument's

						'normal' trading currency. Applies to all offer prices contained in this message
156	SettlCurrFxRateCalc	N				Can be used when the quote is provided in a currency other than the instruments trading currency.
13	CommType	N				Can be used to show the counterparty the commission associated with the transaction.
12	Commission	N				Can be used to show the counterparty the commission associated with the transaction.
582	CustOrderCapacity	N				For Futures Exchanges
100	ExDestination	N				Used when routing quotes to multiple markets
1133	ExDestinationIDSource	N				
775	BookingType	N				
528	OrderCapacity	N				
529	OrderRestrictions	N				
297	QuoteStatus	N				Quote Status
300	QuoteRejectReason	N				Reason Quote was rejected
1328	RejectText	N		Add		Reason description for rejecting the quote.
1664	EncodedRejectTextLen	N		Add		Must be set if EncodedRejectText(1665) field is specified and must immediately precede it.
1665	EncodedRejectText	N		Add		Encoded (non-ASCII characters) representation of the RejectText(1328) field in the encoded format specified via the MessageEncoding(347) field.
58	Text	N				
354	EncodedTextLen	N				
355	EncodedText	N				
StandardTrailer		Y				

5.4 Trade Capture Report Ack

Tag	***FieldName***	***Req'd***				***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				
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
1328	RejectText	N		Add		Reason description for rejecting the TradeCapture

						Report(35=AE).
1664	EncodedRejectTextLen	N		Add		Must be set if EncodedRejectText(1665) field is specified and must immediately precede it.
1665	EncodedRejectText	N		Add		Encoded (non-ASCII characters) representation of the RejectText(1328) field in the encoded format specified via the MessageEncoding(347) field.
818	SecondaryTradeReportID	N				(Deprecated in FIX.5.0)
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				
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 GrossTradeAmout

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 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 outtrade 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 <TrdCapRptAckSideGrp>		N				
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 FIX component blocks

No change for FIX component blocks.

7 Category Changes

Category change is not applicable.

Appendix A - Data Dictionary

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
18	ExecInst	Add enum	MultipleCharValue	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) New value: x- Ignore notional value checks Valid Values: ~~TO BE CHANGED~~	@ExecInst	Moved elaborations of enum descriptions to elaborations and changed enum description case to match the standard.

Val	Description	Elaboration
A	No cross ~~(cross is forbidden)~~	Cross is forbidden.
D	Percent of volume ~~(indicates that the sender does not want to be all of the volume on the floor vs. a specific percentage)~~	Indicates that the sender does not want to be all of the volume on the floor vs. a specific percentage.
H	Reinstate on system failure ~~(mutually exclusive with Q and l)~~	Mutually exclusive with Q and l (lower case L).
J	Reinstate on trading halt ~~(mutually exclusive with K and m)~~	Mutually exclusive with K and m.
K	Cancel on trading halt ~~(mutually exclusive with J and m)~~	Mutually exclusive with J and m.

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				Q — Cancel on system failure ~~(mutually exclusive with H and l)~~ — Mutually exclusive with H and l (lower case L).		
				R — Primary peg ~~(primary market - buy at bid/sell at offer)~~ — Primary market - buy at bid, sell at offer		
				T — Fixed peg to local best bid or offer at time of order		
				U — Customer display instruction ~~(Rule 11Ac1-1/4)~~ — Used in US Markets for: SEC Rule 11Ac1-1/4.		
				X — Trade along		
				Y — Try to stop		
				a — Trailing stop peg		
				b — Strict limit ~~(No price improvement)~~ — No price improvement.		
				c — Ignore price validity checks		
				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		
				k — Best execution		
				l — Suspend on system failure ~~(mutually exclusive with H and Q)~~ — Mutually exclusive with H and Q.		
				m — Suspend on trading halt ~~(mutually exclusive with J and K)~~ — Mutually exclusive with J and K.		
				n — Reinstate on connection loss ~~(mutually exclusive with o and p)~~ — Mutually exclusive with o and p.		
				o — Cancel on connection loss ~~(mutually exclusive with n and p)~~ — Mutually exclusive with n and p.		
				p — Suspend on connection loss ~~(mutually exclusive with n and o)~~ — Mutually exclusive with n and o.		
				q — Release~~(mutually exclusive with S and w)~~ — Mutually exclusive with S and w.		

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
				u – Minimum guaranteed fill eligible v – Bypass non-displayed liquidity w – Lock ~~(mutually exclusive with q)~~ – Mutually exclusive with q.		
103	OrdRejReason	Add enum	int	Code to identify reason for order rejection. Note: Values 3, 4, and 5 will be used when rejecting an order due to pre-allocation information errors. Valid Values: 0 – Broker / Exchange option 1 – Unknown symbol 2 – Exchange closed 3 – Order exceeds limit … 18 - Invalid price increment 99 – Other 19 – Reference price not available 20 – Notional value exceeds threshold	@RejRsn	
1328	RejectText	Add to msg				ExecutionReport OrderCancelReject TradeCaptureReportAck QuoteStatusReport
1664	EncodedRejectTextLen	Add to msg				ExecutionReport OrderCancelReject TradeCaptureReportAck QuoteStatusReport
1665	EncodedRejectText	Add to msg				ExecutionReport OrderCancelReject TradeCaptureReportAck QuoteStatusReport

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