# Errata for FIX Specification version 4.2 May 1, 2001

### **Purpose:**

This document contains a list of minor adjustments to the FIX 4.2 Specification document due to typographical errors or ambiguities. The nature and scope of these adjustments do not introduce new functionality, additional fields, new values for existing fields, or new messages. All of the items specified in this document will be incorporated in the next release of the FIX Protocol. The list of items has been reviewed and approved by the FIX Technical Committee and Steering Committees. Implementers of FIX version 4.2 should refer to this document in conjunction with the FIX 4.2 Specification document to ensure the most consistent implementation and clearest understanding of the FIX protocol.

#### **Outstanding Issues:**

Issues with the FIX 4.2 Specification which have not been addressed by the combination of the FIX 4.2 Specification document or this Errata document, should be brought forward via the FIX web site (<a href="http://www.fixprotocol.org">http://www.fixprotocol.org</a>) discussion pages. It is the responsibility of the FIX Technical Committee to see that outstanding issues are addressed. The FIX Technical Committee is co-chaired by Scott Atwell, American Century (<a href="mailto:scott\_atwell@americancentury.com">scott\_atwell@americancentury.com</a>) and Peter White, Goldman Sachs (peter.white@gs.com).

#### **Proposed Changes document:**

A separate Proposed Changes document will be maintained by the FIX Technical Committee which contains the current list of anticipated changes to the protocol. This document addresses adjustments that introduce new functionality, additional fields, new values for existing fields, new messages, etc. It can be found on the FIX web site (http://www.fixprotocol.org).

## **Minor Adjustments to the Protocol Specification Document:**

Adjusted Date	Section	Item / Adjustment
4/23/2001	SecurityStatus	[E20000608_1] Typographical Error in Security Status Message - Tag #292:
		The SecurityStatus Message (MsgType = f) - Tag#292, has a typographical error "CorporationAction" which should read "CorporateAction".
		Correct typographical error in the SecurityStatus Message replacing "CorporationAction" with "CorporateAction".
4/23/2001	New Order Single, etc.	[E20001104_1] GTBookingInst - Tag #427 should appear on Order Messages
		Tag 427 GTBookingInst is a booking instruction and currently is only present on the Execution Report message - it <u>was intended</u> that this could be conveyed on the order. It should, therefore, be added to the New Order Single, Order Cancel/Replace Request (and Order Cancel Request if we decide that this message should have all the same fields as the New Order Single and Order Cancel/Replace Request). It should not be made an amendable field on the order.

	Add GTBookingInst - Tag #427 as a non-amendable field to New Order Single, Order Cancel/Replace Request, and New Order List. Note that Good Till functionality defined for FIX 4.2 cannot be implemented without this correction and error was made in its ommission.
Exchange Appendix match website	[E20001114_3] Amend Appendix C - Reuters Exchange Mnemonics to match the FIX website's "Tech Resources", "Exchange Codes" section.
	Added "SWX Swiss Exchange" with value of "S". Removed "Zurich Stock Exchange". Renamed "Swiss Options and Financial Futures Exchange (SOFFEX)" as "Eurex Switzerland (SFF)" keeping "Z" value. Renamed "Deutsche Terminboerse (DTB)" as "Eurex Germany (DTB)" keeping "d" value. Added custom value of "15" for "International Securities Market Association (ISMA)".
Exchange Appendix match website	[E20000411_1] Add Exchange Code OJ (for Nasdaq Japan) to Appendix C.
	According to the information from Reuters, they assign OJ as the market of NASDAQ-Japan (new market which will open this June).
	Added to website Tech Resources, Exchange Codes section on 4/11/2000. Added to Appendix C.
Exchange Appendix match website	[E20000417_1] Assign "custom" Exchange Code of "12" for "NYMEX".
	Assigned "custom" Exchange Code of "12" for "NYMEX".  Added to website Tech Resources, Exchange Codes. Added to Appendix C.
Exchange Appendix match website	[E20000925_1] Assign "custom" Exchange Code of "14" for "Jiway"
	Added "Jiway" with custom exchange code of "14" to the website and Appendix C. Jiway is a new pan-European exchange registered in London.
Exchange Appendix	[E20010412_1] Additional Exchange Code: virt-x as VX
	Added "virt-x" with Reuters exchange code of "VX" to FIX website and Appendix C.
Appendix	[E20010424_1] Modify Website and Appendix C Reuters Exchange Codes to reflect new, defunct, and renamed exchanges per information provided by Reuters
materi Webelle	Added, removed (defunct), and renamed numerous exchange
	codes from the FIX website and Appendix C based upon review and recommendation from Reuters.
OrdQty	[E19990915_1] OrdQty should be expressed in shares vs. contracts for Options?
	Add to the OrdQty[38] definition: "The number of shares for equities, normal convention is to use number of contracts for options, futures, convertible bonds, etc."
Tag #431 (ListOrderStatu s)	[E20001114_2] Field Definitions for Tag #431 ListOrderStatus lists value "4" twice, "All Done" should be value "6"
	Note that value 4 is listed twice. Value "4 - All Done" should be "6 - All Done".
	Exchange Appendix match website  OrdQty  Tag #431 (ListOrderStatu

		Change From: Valid values:  1 - InBiddingProcess 2 - ReceivedForExecution 3 - Executing 4 - Canceling 5 - Alert 6 - All Done 7 - Reject  Change To: Valid values: 1 - InBiddingProcess 2 - ReceivedForExecution 3 - Executing 4 - Canceling 5 - Alert 6 - All Done 7 - Reject
4/23/2001	QuoteRequest	[E20000607_1] Add Currency to Quote and QuoteRequest
720,2001	Quoto, toquoot	Tag #15 (Currency) should be present in the Quote and QuoteRequest messages as it is referenced in the message definition text and was intended to be in place for messages with price fields.
		Added Currency as non-required field to the Quote Request message.
4/26/2001	Liquidity in Pgm trading	[E20000308_1] Correct text entry for Liquidity field in Program Trading
		Replace "Liquidity1 and Liquidity2" with "LiquidityPctLow and LiquidityPctHigh" in LiquidityNumSecurities and LiquidityValue field descriptions in Bid Request message and in the LiquidityValue Field Definitions entry.
4/23/2001	Standard MessageHeade r XML fields	[E20000710_4] Add comment to Standard Message Header that Tag #212(XmlDataLen) and Tag #213(XmlData) may be embedded within encryption data
		Note that XmlDataLen and XmlData may appear within encrypted data.
4/23/2001	Field Definitions	[E20000710_2] Typographical error in Field Definition of Tag #412(OutMainCntryUIndex)
		Tag #412(OutSideMainCountryIndex) is on the Bid Request message, but in Field Definitions, that name is "OutMainCntryUIndex", and It may be a different thing?
		Change Field Definition for Tag #412 from, " OutSideMainCountryIndex ", to read, "OutMainCntryUIndex".
4/23/2001	Bid Request	[E20000519_1] FutSettDate and Account are missing Y or N values in "Req'd" column on the Bid Request message
		In the BidDescriptors repeating group, Tag #64(FutSettDate) or Tag #1(Account) are not indicated as "req'd".

		Add "N" to "Req'd" column for Tag #64(FutSettDate) and Tag #1 (Account) on BidRequest message.
4/23/2001	Reject	[E19991110_2of3] Clarify wording regarding sequence numbers in comment on retransmitting rejected messages
		"If the sending application chooses to retransmit the rejected message, it should be assigned a new sequence number" is unclear, being interpreted as you should not resend with the same sequence number.
		Reword the paragraph in question adding: "If the sending application chooses to retransmit the rejected message, it should be assigned a new sequence number and sent with PossResend=Y."
4/23/2001	UnderlyingCont ractMultiplier	[E20000710_1] Tag #'s are reversed for UnderlyingCouponRate
	and UnderlyingCou ponRate	The message reads: Tag #435(UnderlyingContractMultiplier) Tag #436(UnderlyingCouponRate)
		But in Field Definitions, those are reversed Tag #435 (UnderlyingCouponRate) Tag #436 (UnderlyingContractMultiplier)
		The same problem exists in the Quote Acknowledgement, Security Definition Request and Security Definition messages.
		These tags are repeatable, so sequence is important
		The Field Definitions should take precedence over a particular message definition section as to the tag number of the field. Thus UnderlyingCouponRate is tag 435 and UnderlyingContractMultiplier is tag 436 on Mass Quote, Quote Acknowledgement, Security Definition Request, and Security Definition messages.
		Modified all message definitions to correctly identify UnderlyingContractMultiplier as tag 436 vs. 435 and to correctly identify UnderlyingCouponRate as tag 435 vs. 436 matching the field reference. Note the order of these fields within repeating groups did not change.
4/23/2001	FIX News and Email messages	[E20000426_1] News and Email Routing details should be a separate repeating group from RelatdSym details
	messages	The FIX 4.2 Email & News Messages do not define the Routing information correctly. Currently, both messages define the Routing ID information as part of the Related Symbol repeating group and are missing NoRoutingIDs (tag 216).
		NoRelatedSym (146) RoutingType (216) RoutingID (217) RelatdSym (46)
		Should be:
		NoRoutingIDs (215) RoutingType (216) RoutingID (217)

		NoRelatedSym (146)
		RelatdSym (46)
4/23/2001	ExecutionRpt	[E20000426_1] Unclear from the glossary definition of TransactTime or the usage provided on the "New Order - Single" message whether TransactTime is supposed to stay constant throughout the life of the order.
		The above entries currently read as follows:
		Field Definitions: "Time of execution/order creation"  NewOrderSingle usage - "Time this order request was initiated/released by the trader or trading system."
		No usage is given for ExecutionReport causing ambiguity as to whether TransactTime on the ExecutionReport should be the time when the order was placed or the time execution occurred.
		Add to ExecutionReport message definition TransactTime field usage: "Time the transaction represented by this ExecutionReport occurred."
4/23/2001	Message Definitions	[E20000523_1] Remove a space in "MaturityMonthYear" field name in News and Email messages
		Removed a space in "MaturityMonthYear" field name in News and Email messages.
4/23/2001	EncodedIssuer tag	[E20000606_2] Eight messages in FIX 4.2 identify EncodedIssuerLen and EncodedIssuer with incorrect tag numbers
		FIX 4.2 introduced EncodedIssuerLen (348) and EncodedIssuer (349). Eight messages incorrectly identify these two fields as being tags 354 and 355 within their message definition. These should be changed to match the tags defined in the Field Definitions. The following messages will be adjusted: News, Email, Quote Request, Mass Quote, Quote Cancel, Quote Acknowledgement, Market Data Request, Market Data - Refresh, New Order List.
4/23/2001	Message Definitions	[E20000523_3] Remove "manual line breaks" within field names specified in message definitions
		In the definition for messages i, B, C, D there is a new line character in the field name for fields 307 (UnderlyingSecurityDesc), 308, and 310.
		Removed all "manual line breaks" within field names specified in message definitions.
4/23/2001	Message Definitions	[E20000523_5] Rename "OrdRejectReason" as "OrdRejReason" in List Status message definition
		In the definition of the List Status message, field 103's name is specified as "OrdRejectReason" but is "OrdRejReason" in the field definitions.
		Renamed "OrdRejectReason" as "OrdRejReason" in List Status message definition.
4/23/2001	Message Definitions	[E20000523_6] Rename "ProgressRptReqs" as  "ProgRptReqs" in List Status message definition
		In the definition of the New Order – List message, field 414's name is ProgressRptReqs but is ProgRptReqs in the field

		definitions.
		Renamed "ProgressRptReqs" as "ProgRptReqs" in List Status message definition.
4/23/2001	Message Definitions	[E20000710_5] NoQuoteEntries tag is incorrect in Quote Cancel message
		Corrected the Quote Cancel field definition to specify NoQuoteEntries as tag 295 matching the value assigned to the field in the Field Definitions.
4/23/2001	Message Definitions	[E20000523_8] QuoteID tag is incorrect in Quote Status Request message
		Corrected Quote Status Request message definition by specifying QuoteID as tag 117 vs. 37.
4/26/2001	Message Definitions	[E20010424_2] Quote Status Request message incorrectly lists Side as required
		Corrected Quote Status Request message definition by changing Side field's Req'd column from Y to N.
4/23/2001	Message Definitions	[E20000523_9] Rename "SettlCurrAmount" as  "SettlCurrAmt" in Settlement Instructions message definition
		Changed all references to "SettlCurrAmount" to "SettlCurrAmt".
4/23/2001	Message Definitions	[E20000331_1] Bid Request message in FIX 4.2 incorrectly lists StrikeTime as tag 58 vs. 443 (field was also "missed" in the Field Definitions)
		Define StrikeTime as tag 443 in the Field Definitions. Correct the Bid Request field definition to specify StrikeTime as tag 443 matching the value assigned to the field in the Field Definitions.
4/23/2001	Message Definitions	[E20000523_11] Rename "Commission" as "Commission" in Bid Response message definition
		In the definition for message I (lowercase L): For field 12, the field name (commission) is misspelled.
		Replaced "Commission" with "Commission".
4/26/2001	Repeating Groups usage	[E20001106_1] Clarification necessary for repeating groups and nested repeating groups
		Moved existing repeating group details within "Message Format" to a new subsection "Repeating Groups" within "FIX Message Format and Delivery". Added additional clarification. Now reads: Repeating Groups:
		It is permissible for fields to be repeated within a repeating group (e.g. "384=2 <soh>372=6<soh>385=R<soh>372=7<soh>385=R<soh>" represents a repeating group with 2 repeating instances "delimited" by tag 372 (first field in the repeating group.).</soh></soh></soh></soh></soh>
		<ul> <li>If the repeating group is used, the first field of the repeating group is required. This allows implementations of the protocol to use the first field as a "delimiter" indicating a new repeating group entry.</li> <li>The NoXXX field which specifies the number of repeating group instances occurs once for a repeating group and must immediately precede the repeating group contents.</li> </ul>

		<ul> <li>If a repeating group field is listed as required, then it must appear in every repeated instance of that repeating group.</li> <li>Repeating groups are designated within the message definition via indentation and the → symbol.</li> </ul>
		Some repeating groups are nested within another repeating group (potentially more than one level of nesting).
		<ul> <li>Nested repeating groups are designated within the message definition via indentation and the → symbol followed by another → symbol</li> </ul>
		If a nested repeating group is used, then the outer repeating group must be specified
4/23/2001	Mass Quote	[E20000905_2] The Mass Quote message definition indicates that Tag #296 (NoQuoteSets) is Required, but then indicates that the value should default to 1 if not set.
		The following statements should be removed from the Mass Quote message definition as both of the fields in question are specified as Required:
		for Tag #296 (NoQuoteSets) "Defaults to 1 quote set if not set"
		for Tag #302 (QuoteSetID). "Must be used if NoQuoteSets is used."
		Removed the above statements from Mass Quote message.
4/23/2001	SecurityDefiniti on	[E20000626_1] Is Tag #311 (UnderlyingSymbol) conditionally Required only if Tag #146 (NoRelatedSym) > 0.
		Modified the Security Definition message changing UnderlyingSymbol field Req'd value from 'Y' to 'N'. Replaced field comment with "Required if NoRelatedSym > 0".
4/26/2001	Allocation - Tag# 139 (MiscFeeType)	[E20010228_1] Clarification re: Tag #139 (MiscFeeType) and MiscFeeCurr relationship
	(Mileor Go Type)	A clause added to the 4.1 Errata for Tag #139 "(can only occur once within a MiscFee group)" might be misleading. The idea was to prevent someone from associating a USD amt. with both Markup and VAT without itemizing how much for each. This should not be interpreted as don't provide Tag #139 more than once for the entire repeating group.
		Removed "(can only occur once within a MiscFee group)" from the MiscFeeType description in the Allocation message.
4/26/2001	UTCTimestam p	[E20000808_1] Clarify that UTCTimestamp and UTCTimeOnly valid seconds are 0-60 vs. 0-59 to accommodate "leap seconds"
		Since the FIX document specifically mentions UTC, rather than UT or GMT, it should support a range of 0-60 for the UTC seconds field (for those times when a minute has 61 seconds).
		According to the FIX 4.2 specification of the data type UTCTimestamp (page 7), valid values for seconds are 0-59. UTC (Coordinated Universal Time) differs from plain UT (Universal Time) mainly in having leap seconds (see http://tycho.usno.navy.mil/leapsec.html).
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		Modify UTCTimestamp and UTCTimeOnly data type formats to allow 0-60 vs. 0-59 for seconds. Add the following statement:
		Note that UTC includes corrections for leap seconds, which are inserted to account for slowing of the rotation of the earth. Leap second insertion is declared by the International Earth Rotation Service (IERS) and has, since 1972, only occurred on the night of Dec. 31 or Jun 30. The IERS considers March 31 and September 30 as secondary dates for leap second insertion, but has never utilized these dates. During a leap second insertion, a DateTime field may read "19981231-23:59:59", "19981231-23:59:60", "19990101-00:00:00". (see http://tycho.usno.navy.mil/leapsec.html)
4/26/2001	leading zeros	[E20000825_1] Note that numeric fields may appear with leading zeros (e.g. sequence numbers or field tags)
		Added to int data type: "Note that int values may contain leading zeros (e.g. "00023" = "23")."
		Added to float data type: "Note that float values may contain leading zeros (e.g. "00023.23" = "23.23") and may contain or omit trailing zeros after the decimal point (e.g. "23.0" = "23.0000" = "23")."
4/23/2001	using SecurityDef for list of tradable	[E20000502_2] TotNumSecurities is in spec but not specified in SecurityDefinition message
	securities	FIX 4.2 introduced the Security Definition message and due to a typographical error, the field TotNumSecurities field was not listed as part of the message. This was an oversight and is necessary to support fragmentation of large symbol lists? (SecurityResponseType=4, list of securities)
		Added TotNumSecurities (393) to the Security Definition message.
4/23/2001	RatioQuantity	[E20010228_2] - RatioQty should be Quantity vs. float data type
		Change Field Definitions to specify RatioQty is of type Quantity vs. float (note does not change the underlying base data type).
4/26/2001	Tag #141 (ResetSeqNum Flag)	[E20000908_1] Clarify action to take if ResetSeqNumFlag process is not followed properly
		Added "The connection should be shutdown and manual intervention taken, if this process is initiated but not followed properly." to the end of the "When using the ResetSeqNumFlag to maintain 24 hour connectivity and establish a new set of sequence numbers, the process should be as follows" Paragraph.
4/23/2001	Pegged OrdType	[E20000831_1] Add ExecInst values T and W to OrdType value "Pegged"-related statements "requires ExecInst = L, R, M, P, or O"
		The description for the Pegged OrdType said it requires certain Execlnst values. Two new pegging types, T and W, have been added to the FIX 4.2 specification.
		Removed "(requires ExecInst = L, R, M, P, O)" from the OrdStatus Field Definitions entry. Added "If OrdType=P, exactly one of the following values (ExecInst = L, R, M, P, O, T, or W) must be specified." to the ExecInst description in the New Order

		Single and New Order List message definitions.
4/23/2001	Appenidx D37 - OrdStatus	[E20000727_1] A contradiction currently exists between the instructions in Appendix D37 and the precedence list in the Exec report section of the FIX specification.
		The precedence list in the Exec report section of the FIX Specification shows OrdStatus "stopped" with a higher precedence than "partially filled".
		Currently, when a new order is stopped, then D37 (@T=3) reports back the order status as "stopped". If the order is part-filled, then D37 says ExecType should be partial fill and the OrdStatus should be partial fill. The order is really in 2 states (partially filled and stopped) but precedence dictates that the order is "stopped" only.
		Amend the FIX 4.2 specification, Appendix D37, Change State Matrix as follows:
		When a new order is stopped after being partially filled, D37 (@T=4) should show the OrdStatus as stopped (with ExecType = partial fill).
		Thus, the order is still in "stopped" state while ExecType makes it clear why the execution report was sent.
		Changed OrdStatus for D37, time=4 from "Partial Fill" to "Stopped".
4/23/2001	AllocTransType formatting	[E20000628_1] On page 144 of FIX4.2, the description of valid values for Tag #71(AllocTransType) has formatting problems.
		Added carriage returns between enums in Field Definition for AllocTransType.
4/23/2001	SecurityDefiniti on	[E20000817_2] Allow value of "?" to Tag #167 (SecurityType) per the capability specified in the Security Definition Request message
		Security Definition Request message illustrates using "?" as a wildcard on a request.
		Added "?" as a valid enum for the SecurityType field in the Field Definitions with description: " = "Wildcard" entry (used on Security Definition Request message)".
4/26/2001	Gap Fill vs. Seq Reset Speicify Seq Reset - in normal resend	[E20010131_1] Clarify use Sequence Reset - Gap Fill to mark the place of an application message which has been chosen to not be resent
	processing	Regarding Sequence Reset (Gap Fill) Messages, the Fix 4.2 specification states, "During normal resend processing, the sending application may choose not to send a message (e.g. an aged order). The Sequence Reset can be used to mark the place of that message."
		The last sentence of the paragraph should be amended to read, "The Sequence Reset - Gap Fill is used to mark the place of that message."
4/26/2001	Seq Reset	[E20000831_2] Stronger language and more clearly state that Sequence Reset – Reset should <u>only</u> be used in situations recovering from disaster

		Replaced "Note that the SeqReset-Reset message is an exception to this rule as it should be processed without regards to its MsgSeqNum." With "Note that the SeqReset-Reset message (used only to recover from a disaster scenario vs. normal resend request processing) is an exception to this rule as it should be processed without regards to its MsgSeqNum."
		Added "This message has two modes: "Sequence Reset- Gap Fill" when GapFillFlag is 'Y' and "Sequence Reset- Reset" when GapFillFlag is N or not present. The "Reset" mode should only be used to recover from a disaster situation which cannot be otherwise recovered via "Sequence Reset- Gap Fill" mode." To opening paragraph in Sequence Reset message definition.
		Added "Sequence Reset – Reset should NOT be used as a normal response to a Resend Request (use Sequence Reset – Gap Fill)." To the end of the "During normal resend processing," paragraph.
		Added "Sequence Reset – Reset should NOT be used as a normal response to a Resend Request (use Sequence Reset – Gap Fill). Sequence Reset – Reset should <b>ONLY</b> be used to recover from a disaster situation which cannot be recovered via the use of Sequence Reset – Gap Fill. Note that the use of Sequence Reset may result in the possibility of lost messages". To the end of the "If the GapFillFlag field is not present (or set to N)," paragraph in Sequence Reset message definition.
4/23/2001	Exec Rpt Commission	[E19990708_2] Clarify that Commission on ExecRpt for ExecType=Partial Fill vs. Calculated
		Commission in Ex Rpt if flat amount should be amt of commission per fill if dealing w/ a partial, sum of commission on calculated
		Added "On a fill/partial fill represents value for that fill/partial fill, on ExecType=Calculated represents cumulative value for the order." To the ExecutionRpt message's Currency field.
4/23/2001	Exec Rpt Commission	[E20001218_1] Clarify that Commission on ExecutionRpt should be expressed in Currency (15) field
		Clarify that Commission on ExecutionRpt should be expressed in the Currency field.
		Added "Monetary commission values expressed in Currency." To the ExecutionRpt message's Currency field.
4/26/2001	List Status Message	[E20000609_1] The List Status Message specifies Text, EncodedTextLen, and EncodedText in both the message itself and also in the repeating group violating fundamental FIX parsing rule. Correct by adding 3 new fields
		Add 3 new, missing fields ListStatusText, ListStatusEncodedTextLen, and ListStatusEncodedText to the List Status message and Field Definitions to remain consistent with protocol's parsing rule of tags should not appear more than once in a message unless within a single repeating group.
		Note justification for the change as Errata is to correct an error

		which violates a fundamental parsing rule of tag may only appear once within a message (unless in a repeating group) and not both within a repeating group and outside of a repeating group.
4/23/2001	SecurityDefiniti on Message? errors re: comments for Underlying fields	[E20001211_1] The Security Definition message In the FIX 4.2 specification contains both Security information and Underlying Security information. There is a repeating group containing Underlying information and the comments for some of these Underlying fields are incorrect as follows:
		Modify comments for UnderlyingSecurityType (310) replacing: "Symbol, SecurityType, MaturityMonthYear, PutOrCall and StrikePrice" with: "UnderlyingSymbol, UnderlyingSecurityType, UnderlyingMaturityMonthYear, UnderlyingPutOrCall and UnderlyingStrikePrice"
		Modify comments for UnderlyingMaturityDay (314) replacing: "MaturityMonthYear" with: "UnderlyingMaturityMonthYear"
		Made the above changes to Security Definition Request and Security Definition messages.
4/25/2001	HeartBtInt - intervals on	[E20001205_1] Clarify that both sides use the same heartbeat interval which is provided by the Logon initiator
	dual Logon exchange	State that both sides should use the same heartbeat interval (the HeartBtInt provided on the initiator's Logon).
		Added "The HeartBtInt value should be agreed upon by the two firms and specified by the Logon initiator and echoed back by the Logon acceptor. Note that the same heartbeat interval value is used by both sides (Logon "initiator" and Logon "acceptor" use the same value)." to the "Heartbeats" section within "FIX MESSAGE FORMAT AND DELIVERY".
		Added "(same value used by both sides). The HeartBtInt value should be agreed upon by the two firms and specified by the Logon initiator and echoed back by the Logon acceptor." to "The HeartBtInt (108) field is used to declare the timeout interval for generating heartbeats." Statement in the Logon message definition. Added "To the Logon message definition. Added "Note same value used by both sides" to the Logon message's HeartBtInt field reference.
4/23/2001	Logon MsgType repeating group should be 372 RefMsgType	[E20001213_1] Logon message error: MsgType is in both the header and the body violating fundamental FIX parsing rule. Correct replacing MsgType in body with RefMsgType (372)
	vs. 35 MsgType	Replace MsgType (35) within Logon message body's repeating group with RefMsgType (372). Clarify that the RefMsgType repeating group within the Logon message "should be specified from the point of view of the sender of the Logon message".
1/07/0004		Note justification for the change as Errata is to correct an error which violates a fundamental parsing rule of tag may only appear once within a message (unless in a repeating group) and not both within a repeating group and outside of a repeating group.
4/25/2001	Only one, not	[E20001219_3] Clarify that either CashOrderQty or OrderQty,

	both	but not both, should be specified on the Order messages
	CashOrderQty	_
	and OrderQty specified on	Added "Note that either, but not both, CashOrderQty or OrderQty should be specified." after "Either CashOrderQty or OrderQty is
	Order	required." On the New Order Single, Order Cancel/Replace
		Request, and New Order List message definitions.
4/23/2001	Field #59	[E20001219_4] Correct typo with TimeInForce value
	TimeInFomrce (should be	Immediate or Cancel acronym
	"(IOC)" vs.	FIX-42.doc (Page 146) states field #59 TimeInForce should
	"(OC)" in Field	have the valid value 3=Immediate or Cancel (OC). The
	Definitions	documentation is incorrect and it should read (IOC) and not (OC).
		Modify Field Definitions for TimeInForce replacing "(OC)" with "(IOC)".
4/23/2001	Alloc Cancel,	[E20001222_1] Clarify that AllocTransType of Cancel,
	Reject, Replace for	Reject, or Replace affects the entire Allocation message vs. a single AllocAccount instance
	entire allocation	a Single Allocaccount instance
	vs. single order,	Add to Allocation message definition: "Note that AllocTransType
	exec, or account.	of Cancel, Reject, or Replace affects the entire Allocation
	account.	message thus each AllocAccount (cannot cancel, reject, or replace a single AllocAccount instance without affecting the
		entire Allocation messge)."
4/23/2001	Tag #160	[E20001222_2] Correct Allocation message reference of
	SettlInstMode When can	valid values for SettlinstMode to include 0 ("Default")
	value 0 be	Tag #160 SettlInstMode can have values 0, 1, 2, or 3 per the
	used?	"Field Definitions", however, a value of 0 ("Default") would not be
		applicable on a Settlement Instructions message. It could be specified on the Allocation message. Note that the Allocation
		message specification of that field does not mention value 0, but
		should.
		Add to the Allocation message definition reference to
1/0.1/0.01	0 (0)	SettlInstMode that "0" is a valid value.
4/24/2001	Open/Close should not state	[E20001222_3] Remove "for options only" from references to OpenClose field
	"for options	to Open close neid
	only"	OpenClose currently states "for options only" but should be used
		to indicate open/close regardless of product type.
		Remove "for options only" from references to OpenClose field.
		Added "Used to indicate if the resulting position after a trade
		should be an opening position or closing position. Used for
		omnibus accounting - where accounts are held on a gross basis instead of being netted together."
4/23/2001	Order State	[E20001228_1] Correct typo in Appendix D entry D31
	Matrix D31 in	
	4.2 incorrect	Order State Matrix D31 - Poss Resend order in the FIX 4.2 specification contains a minor error. The last line should read
		15000 not 10000 for the Order Qty and Leaves Qty.
4/23/2001	Clarify	[E20001227_1] Clarify requirement for OrigSendingTime
	definition of "resent	Modify "Standard Massage booder" eastion comment for field
	message" for	Modify "Standard Message header" section comment for field OrigSendingTime (122) replacing:
	OrigSendingTi	"Required for message resends"
	me	with
	requirement.	"Required for messages resent as a result of a ResendRequest"

	Correct Field Definition for AllocTransType usage	[E20001227_2] Modify Field Definitions entry for AllocTransType adding "Calculated" to "required for" list
		In the Field Definitions, the comments for field #72 say "Reference identifier to be used with Replace and Cancel AllocTransType messages". However, in the Allocation message (MsgType = J) the comments for field #72 reads "Required for AllocTransType = Calculated, Replace, or Cancel".
		The Allocation message's comments are the correct ones in this case. The Field Definition entry for that field should include Calculated (introduced in FIX 4.1) in that list.
		Modify the Field Definitions entry for RefAllocID replacing: "Reference identifier to be used with Replace and Cancel AllocTransType messages" With: "Reference identifier to be used with Replace, Cancel, and Calculated AllocTransType messages"
4/23/2001	Field #15	[E20001227_6] Remove USD reference on Bid Request
	Currency Remove	message Currency field
	"Assumed USD" from BidRequest's field definition.	The Field Definitions the comment for field #15 Currency reads, "Absence of this field is interpreted as the default for the security." The Bid Request message (MsgType = k) the comment on field #15 reads, "Assumed USD in absence".
		Modify the Bid Request message definition's description of Currency field removing: "Assumed USD in absence" as all USD defaults references should have been removed in FIX version 4.2.
4/26//2001	Settlement Instructions	[E20010102_1] Appendix F - Settlement Instructions Field Usage Reference clarifications
		Added "See Appendix F" to the text for the Settlement Instructions message definition.
		Replaced "(either SettlDepositoryCode or SecuritySettl*)" with "(if SettlDepositoryCode is not specified, one of more of the SecuritySettl* fields are required)" in Appendix F.
4/26/2001	Glossary - difference between	[E20010117_1] Clarify the difference between MaxShow and MaxFloor
	MaxShow and MaxFloor	Added the following to "Appendix E - Order Handling and Instruction Semantics":
		"Reserve Quantity" Orders
		MaxFloor: Traditionally used to indicate reserve quantity. To indicate a single level of reserve quantity, MaxFloor should be used.
		<ul> <li>MaxShow: Used when two levels of reserve quantities are needed, e.g. one level displayed to the world (MaxFloor) and another displayed to subscribers of their ECN (MaxShow.) I.e. MaxFloor &lt;= MaxShow &lt;= OrderQty.</li> <li>One may place an order for 100,000 shares (OrderQty), only</li> </ul>
		want 1000 shares shown to NASDAQ at any one time (MaxFloor), but will allow other subscribers of that ECN to see 5000 shares (MaxShow).

4/23/2001	Use msg's ID field for PossResend checking	[E20010116_1] Clarify that PossResend duplication checking should use the unique id of the application message (e.g. ClOrdID) for the dupe check
	Criconing	Add to "MESSAGE FORMAT AND DELIVERY" section's "Possible Resends" paragraph: "The receiver of the message should check the unique id associated with the application-level message for duplication and process or not process it accordingly".
		Replace: "New Order messages received with the PossResend flag set in the header should be validated by ClOrdID and order parameters (side, symbol, quantity, etc.) to determine if the order had been previously submitted." With: "New Order messages received with the PossResend flag set in the header should be validated by ClOrdID and consider checking order parameters (side, symbol, quantity, etc.) to determine if the order had been previously submitted." Adding "consider checking".
4/23/2001	"Quote" vs. "Order" in enums for Tag #300 QuoteRejectRe	[E20010127_1] Correct QuoteRejectReason values' references to "Order" with "Quote Request"  There is a typo in the description for Tag #300 QuoteRejectReason and Tag #368 QuoteEntryRejectReason.
	ason	The following values: 3=Order exceeds limit 5=Unknown Order 6=Duplicate Order
		Should read: 3=Quote Request exceeds limit 5=Unknown Quote 6=Duplicate Quote
		Change the wording in the value descriptions of Field #300 QuoteRejectReason and Field #368 QuoteEntryRejectReason from "Order" to "Quote Request or Quote.
4/23/2001	Tag #423 PriceType	[E20010131_2] Replace "cents per share" with "per share (e.g. cents per share)" to avoid USD references
	Remove "cents" from "cents per share"	The current wording in the description of Tag #423 PriceType reads, "cents per share" which applies only to USD and I inaccurate if any other currency is involved.'
		Replace the phrase, "cents per share" in the description of Tag #423 PriceType to reflect some non currency specific amount such as "per share (e.g. cents per share)".
4/26/2001	Glossary - Define difference between	[E20010202_1] Rename Appendix E "Order Handling and Instruction Semantics" and make present "London SETS Order Types Matrix" a subsection
	"Market Order" and "Market Pegged Order"	Rename "Appendix E - London SETS Order Types Matrix" as "Appendix E - Order Handling and Instruction Semantics". Make present "London SETS Order Types Matrix" a section within the appendix in preparation for other sections.
4/26/2001	Glossary - Define	[E20010202_1] Clarify Pegged orders

Add the following to the "Pegged Orders" section of the new difference "Order Handling and Instruction Semantics" Appendix (rename between "Market Order" Appendix E and make "London SETS Order Types Matrix" a and "Market subset): Pegged Order" The following are all pegging Execlnst values used when OrdType=P to specify the type of pegged order represented. Note that these fields cannot be combined; only one may be specified on a pegged order. L = Last peg (last sale) M = Mid-price peg (midprice of inside quote) O = Opening peg P = Market peg R = Primary peg (primary market - buy at bid/sell at offer) T = Fixed Peg to Local best bid or offer at time of order W = Peg to VWAPA pegged order acts like a limit order, except that the limit price fluctuates relative to another quantity, such as the last sale, midpoint, opening price, bid, offer, or VWAP (Volume Weighted Average Price). A primary peg order is priced relative to the bid if buying, the offer if selling. A market peg order is priced relative to the offer if buying, the bid if selling. In the absence of the PegDifference field, or when PegDifference = 0, the price of the pegged order follows the referenced quantity exactly. If PegDifference is specified, the referenced quantity + the PegDifference = the price of the order. Some systems allow pegged orders to be specified with a Price field. In this case, the Price field serves to put a limit on how far the pegged value can move. For instance, if the bid for a stock is 50, the offer is 50.10, the order is a primary peg to sell, PegDifference = -0.02, and Price = 45, the order will be priced to sell at the offer + (-0.02) or 50.08. If the offer falls, the order's price will fall such that it is always 0.02 less than the offer. However, once the order's price hits 45 (the limit specified in the Price field) it can fall no further. A pegged order with ExecInst = T (Fixed Peg to Local best bid or offer at time of order) behaves differently in two ways. First, it acts like a Primary peg, but it is relative to the local best bid or offer, not the global best bid or offer. (For instance, in an ECN environment, this would be the best bid or offer on the particular ECN, not the best price available in the national marketplace.) Second, once an initial price for the order is set, unlike normal pegged orders, the price will not move even if the best bid or offer of the local marketplace moves. 4/26/2001 Asia Regional [E20010116 1] Careful Discretion Proposal - Asia/Pac Steerig Regional Order Handling definitions Committee Order handling After discussion the Asia/Pac Regional Steering Committee (Careful proposed the following permanent definitions for Order Handling Discretion) on Jan 16, 2001: proposal DEALER INSTRCTION FIX ORDER TYPE/EXEC INST 1) Careful Discretion = Market/Over the Day

		2) Market = Market/Held
		Market = Market/Held     Trader Discretion = Market/Not Held
		Add to "Asia/Pac Regional Order Handling" section in new
		"Order Handling and Instruction Semantics" Appendix (rename
4/25/2001	Quote Request,	Appendix E).  [E20000817_3] Several messages' SecurityType description
4/25/2001	Quote Request, Quote Cancel	erroneously refer to non-existent RelatedSymTag
	Market Data	choneously refer to non-existent related by in rag
	Request, New	Modify Quote Request, Quote Cancel, Market Data Request,
	Order - List:	and New Order - List message's SecurityType description
		replacing: "If a Future Related Sym Security Type and Maturity Manth Veer
		"If a Future, RelatedSym, SecurityType, and MaturityMonthYear are required. If an Option: RelatedSym, SecurityType,
		MaturityMonthYear, PutOrCall, and StrikePrice are required."
		With:
		"If a Future, Symbol, SecurityType, and MaturityMonthYear are
		required. If an Option: Symbol, SecurityType, MaturityMonthYear, PutOrCall, and StrikePrice are required."
		Replacing references to non-existent "RelatedSym" field with
		"Symbol".
4/25/2001	4.1 too	[E20000412_1] Add "Copyright FIX Protocol Ltd" to the
		specification doc
		Add "Copyright FIX Protocol Ltd" to the specification doc
4/25/2001		[E19990525_1] Clarify Logout message language regarding
1,20,2001		messages sent after Logout
		Replace "The logout initiator should not send any message after
		the logout" with "After sending the Logout message, the logout initiator should not send any messages unless requested to do
		so by the logout acceptor via a ResendRequest" in Logout
		message definition.
4/25/2001		[E19990823_1] MaturityMonthYear must be specified if
		MaturityDay is used
		If one sends MaturityDay, one should also send
		MaturityMonthYear. The premise behind why these were split
		was a requirement to be able to refer to "March 2000" S&P's
		without having to know and specify the exact date. We split
		them to avoid having to support some sort of "dummy" day value in a normal date format. This provides the ability to provide a
		specific date (by using MaturityMonthYear and Maturity Day) or a
		commonly agreed and well understood representation of
		MaturityMonthYear.
		Added to MaturityMonthYear references "Required if MaturityDay
		is specified." Added to UnderlyingMaturityMonthYear references
		"Required if UnderlyingMaturityDay is specified."
4/25/2001		[E19990831_1] Clarify that all tags must have a value
		A LL L L MAIL LAND AND AND AND AND AND AND AND AND AND
		Added "All tags must have a value specified. Optional fields without values should simply not be specified in the FIX
		message. A Reject message is the appropriate response to a
		tag with no value." to "FIX MESSAGE FORMAT AND
		DELIVERY" section's "Message Format" subsection.
4/25/2001	ClOrdID	[E19990430_6] ClOrdID uniqueness clarification
	uniquness	ClOrdID uniqueness needs to be better defined to accommodate
		OnBehalfOfCompID/DeliverToCompID processing and Good Till
	•	

		(GT) orders.
		(G1) orders.
		Modify the Field Definition Section for ClOrdID replacing: "Unique identifier for Order as assigned by institution. Uniqueness must be guaranteed within a single trading day. Firms which electronically submit multi-day orders should consider embedding a date within the ClOrdID field to assure uniqueness across days."
4/25/2001	Field	With:  "Unique identifier for Order (including order cancel and order Cancel/replace) as assigned by institution (identified by SenderCompID or OnBehalfOfCompID as appropriate).  Uniqueness must be guaranteed within a single trading day.  Firms, particularly those which electronically submit multi-day orders, trade globally or throughout market close periods, should ensure uniqueness across days, for example by embedding a date within the ClOrdID field."  [E19990129_26] Clarify that ClientID is not a substitute for
4/25/2001	Definitions	OnBehalfOfCompID or DeliverToCompID
		Modify the definition of ClientID replacing: "Used for firm identification in third-party transactions". With: "Used for firm identification in third-party transactions (should not be a substitute for OnBehalfOfCompID/DeliverToCompID)".
4/25/2001		[E20010412_3] Clarify that if OnBehalfOfCompID or DeliverToCompID message source identification/routing is to be used then it must be used on all Application messages
		Add to "Standard Message header": "Note that if OnBehalfOfCompID or DeliverToCompID message source identification/routing is used for a FIX session, then it must be used on all Application messages transmitted via that session accordingly (Reject message if not)."
4/25/2001		[E19990706_3] Clarify EndSeqNum value to match a client's ResendRequest vs. what one side views as end
		Replaced: "The sending application will initiate the sequence reset. The message in all situations specifies NewSeqNo to reset as the value of the next sequence number to be transmitted."
1/00/0004		With: "The sending application will initiate the sequence reset. The message in all situations specifies NewSeqNo as the value of the next sequence number immediately following the messages and/or sequence numbers being skipped."
4/26/2001	How to handle invalid Logon	[E20001219_1] Clarify that sending a Logout message is optional if authentication fails
		Replaced "If authentication fails, the session acceptor should shut down the connection."
		With:  "If authentication fails, the session acceptor should shut down the connection after optionally sending a Logout message to indicate the reason of failure. Sending a Logout in this case is not required because doing so would consume a sequence number for that session, which in some cases may be

		problematic."
4/30/2001		[E19990616_1] Clarify definition of Handlnst values  Added "Handling Instructions (HandlInst) field" to Appendix E –  Order Handling and Instructions Semantics.
5/1/2001	Request for PDF version of spec.	[E20001129_1] Consider posting the specifications in PDF format as well as WORD format.  We currently have an HTML version in addition to the Word format.  Use Adobe Acrobat to create a PDF format as well for future versions.