

Xetra® Release 12.0

Release Description

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1 Introduction

This document describes improvements and developments which will be implemented in Xetra Release 12.0. The Release Description is focused on the scope for the members of the Frankfurt Stock Exchange and is written for Xetra project coordinators, system administrators and trading department personnel. It provides an outline of the new functionality and technical changes. The production start for this release is planned for November 28, 2011 and will be mandatory for the participants of all Xetra markets.

With Xetra Release 12.0 major functional enhancements are planned especially regarding on-exchange trading.

First of all the Strike Match Order is introduced for trading model Continuous Trading which builds a bridge between Xetra and Eurex to reduce the so-called "pin risk" of equity options quoted at-the-money. This order is characterized by an additional limit defining the minimum (for a buy order) or the maximum price (for a sell order) at which the order can be executed in the Closing Auction.

With the new release orders can be entered in Continuous Trading as Top-of-the-Book Order which ensures that the order is either placed on top of the order book or is rejected.

Additional order book related functionality in Xetra 12.0 is the introduction of a Cross Request functionality which can be used to inform all market participants about a crossing or a pre-arranged trade that should be executed in the Xetra order book.

The determination of an auction price without turnover which is currently used only for Exchange Traded Funds (ETFs) and Exchange Traded Products (ETPs) will be enhanced with Xetra Release 12.0. It will then be possible to have an auction price without turnover out of the closing auction even if the price would trigger a volatility interruption as long as a quote of the contractual Designated Sponsor is available. Through this procedure, the probability of an evaluation price being available is increased.

The entry of quotes with the Designated Sponsor account will be supported for all members and users in Xetra Frankfurt even if they do not have the respective license assigned.

With Xetra Release 12.0 Stop Button functionality is introduced for Clearing Members. It enables Clearing Members to declare that they no longer consent to process the transactions of their Non-Clearing Members, if the latter exceed their agreed trading limits. Clearing Members can thereby stop (or release again) all trading activities of an assigned Non-Clearing Member.

Xetra is used by many exchanges and for many markets. But in the same environment, a given ISIN can currently be traded only once. With the introduction of Multi Exchange Capability as an integral part of Xetra Release 12.0, the ISIN can be traded multiple times in the same environment, however only once per market. Hence, to identify an instrument correctly it is necessary to use ISIN and exchange ID. Also, the currently limited usage of trading and settlement calendars for various markets in the same environment will become more granular.

In trading model "Continuous Auction" the capability of handling single market segments in one environment is improved. Thereby the trading times of, e.g. Scoach and other instruments in Xetra Frankfurt 2 can be handled more individually.

Besides these functional enhancements several performance improving changes will be made. As one effect the private unreliable broadcasts "All Order Confirmation" and "Quote Confirmation" are discontinued. Additionally the order number concept in Xetra is changed. With Release 12.0 the system order number will always stay the same over the whole lifecycle of an order. Modifications like changing the limit of an order will not lead to a new order number anymore.

With Release 12.0, Xetra introduces a Common Report Engine service, enabling centralised provision of reports. This service is based on a secure ftp (report) server and offers Members to retrieve all of their reports from a single source. The service is provided independent from the MISS servers in place.

Further to the features outlined above, Xetra Release 12.0 supports integration of current order book information from a reference market through an external reference price stream. This feature will not be active as of the start of Xetra Release 12.0.

As already announced in September 2010, Deutsche Börse will introduce two new interfaces as part of its interface strategy. The Xetra FIX Gateway will provide a native FIX interface for order handling and trade capture on member level supporting FIX version 4.2 and 4.4. The new Xetra Market Data Interface will provide netted market data in FIX 5.0 over FAST 1.2 format.

Both new interfaces provide easier access to Xetra and will enable customers to replace their current VALUES API infrastructure. In order to minimise costs for the members, both interfaces will be launched as part of the annual system release in November 2011 with Xetra Release 12.0 (and Eurex Release 14.0).

The functionality of the Xetra Enhanced Transaction Solution and Enhanced Broadcast Solution will be generally extended in the course of Xetra 12.0 and both interfaces will be offered for the first time in Xetra Frankfurt 2 as well.

2 Functional Enhancements of Xetra Release 12.0

2.1 Strike Match Order

2.1.1 Overview

The Strike Match Order builds a bridge between Xetra and Eurex. Using this order allows to reduce the so-called "pin risk" of equity options quoted at-the-money. Therefore, the Strike Match Order shall only be used on expiration days of equity options.

A Strike Match Order is a new order with an additional limit that can be added for limit or market orders. With this additional limit the minimum price for a buy order or the maximum price for a sell order is defined. The Strike Match Order can only be used in the Closing Auction in trading model Continuous Trading and has been designed for trading members who wish to perform their hedging transactions on Xetra in a more efficient way, i.e. avoiding unintended executions (see 2.1.2 Matching Examples; Scenario 1).

An order that should be entered as Strike Match Order has to be marked with the new execution restriction "SMO" and needs to have trading restriction "CA" ("Closing Auction only"). While changing the additional limit will be possible, the execution restriction and the trading restriction cannot be modified. Regarding the matching priority only changes of the normal limit (including modifications from or to a market order) will have an influence. Strike Match Orders will only be valid for the Closing Auction of the respective trading day and are deleted during the end of day processing.

In general the price determination in auctions follows the principle of highest executable volume with lowest surplus. Before introducing the Strike Match Order, the accumulated quantity of buy orders/ sell orders is by definition weakly monotone increasing or decreasing. However, by introducing the Strike Match Order this is not the case anymore. It will be possible to have the same executable volume with the same surplus on different sides of the order book and even taking the reference price into account may not lead to a definite price. If in an Closing Auction the situation comes up that different prices with the same volume and the same surplus on different sides are possible, the price closest to the reference price will be determined (see 2.1.2 Matching Examples; Scenario 2 and 3). If the reference price is in the middle of two possible prices the auction price will be determined at the potential price with the highest limit (see 2.1.2 Matching Examples; Scenario 4).

2.1.2 Matching Examples

A matching example will illustrate the advantage of using the Strike Match Order to hedge a position compared to e.g. the usage of a market order. For simplicity reasons it is assumed that the tick size for the examples is 1.00 EUR.

Scenario 1: How the Strike Match Order protects from unintended Executions

Table 1: Scenario 1: Order Input

Order Type	Min Limit	Max Limit	Quantity	Trade Direction
Market			250	Buy
Limit		199	150	Buy
Market			300	Sell
Limit	198		200	Sell
SMO / Market	200		50	Buy
Reference Price		201		

The SMO order represents a hedge trade, where the trader wants to buy, if the auction price exceeds 200 EUR. Table 2 shows the impact, if instead of a SMO a regular market order is used. Then, in Table 3, it is illustrated how a SMO can provide a benefit by avoiding an unintended execution.

Table 2: Scenario 1: Resulting Order Book Situation if regular market order instead of SMO with a minimum limit is used

Buy Cum. Quantity	Surplus	Auction Price EUR	Sell		Max Exec Volume	Surplus
			Surplus	Cum. Quantity		
450	0	199	50	500	450	50
450	0	198	50	500	450	50

The potential auction prices are 198 EUR and 199 EUR. Since all of them have a surplus of supply the auction price will be determined at the lowest possible limit 198 EUR.

Assuming in this scenario the trader entered a market order instead of the SMO, he will be executed, even though the price is below 200 EUR.

Table 3: Scenario 1: Resulting Order Book Situation with Strike Match Order

Buy Cum. Quantity	Surplus	Auction Price EUR	Sell		Max Exec Volume	Surplus
			Surplus	Cum. Quantity		
400	0	199	100	500	400	100
400	0	198	100	500	400	100

The potential auction prices are 198 EUR and 199 EUR. Since all of them have a surplus of supply the auction price will be determined at the lowest possible limit 198 EUR.

This time, the trader entered a SMO instead of a market order. The minimum limit of the SMO has the effect that the SMO is not executed because the auction price is below 200 EUR. This protects the hedge trader from an unintended execution.

Some additional matching examples are given below to illustrate the price determination in certain situations that newly may arise because of the existence of an SMO in the order book. For simplicity reasons it is assumed that the tick size for the examples is 1.00 EUR.

Scenario 2: Price Determination SMO: No Surplus and Reference Price is a possible Auction Price

Table 4: Scenario 2: Order Input

Order Type	Min Limit	Max Limit	Quantity	Trade Direction
Market			200	Buy
SMO	205	208	200	Sell
SMO	201	203	200	Sell
Reference Price		205		

Table 5: Scenario 2: Resulting Order Book Situation

Buy		Auction Price	Sell		Max Exec Volume	Surplus
Cum. Quantity	Surplus		Surplus	Cum. Quantity		
200	0	205	0	200	200	0
200	0	201	0	200	200	0

The potential auction prices are 201 and 205 EUR. There is no surplus side to determine the auction price. The reference price is taken to find the correct auction price. Since the reference price is one potential auction price the reference price itself is determined as auction price: 205 EUR.

Scenario 3: Price Determination SMO: No Surplus with Reference Price is not a potential Auction Price and is somewhere between highest and lowest possible price

Table 6: Scenario 3: Order Input

Order Type	Min Limit	Max Limit	Quantity	Trade Direction
Market			200	Buy
SMO	206	208	200	Sell
SMO	201	203	200	Sell
Reference Price		204		

Table 7: Scenario 3: Resulting Order Book Situation

Buy		Auction Price	Sell		Max Exec Volume	Surplus
Cum. Quantity	Surplus		Surplus	Cum. Quantity		
200	0	206	0	200	200	0
200	0	201	0	200	200	0

The potential auction prices are 201 and 206 EUR. There is no surplus side to determine the auction price. The reference price is taken to find the correct auction price. Since the reference price is not a potential auction price, the nearest potential prices below (201 EUR) and above (206 EUR) the reference price are taken into account for further evaluation. The reference price is not exactly in the middle of 201 and 206. Hence the potential auction price nearest to the reference price is determined as auction price: 206 EUR.

Scenario 4: Price Determination SMO: No Surplus with Reference Price is not a potential Auction Price and is exactly in the middle of the highest and lowest possible price

Table 8: Scenario 4: Order Input

Order Type	Min Limit	Max Limit	Quantity	Trade Direction
Market			200	Buy
SMO	207	208	200	Sell
SMO	201	202	200	Sell
Reference Price		204		

Table 9: Scenario 4: Resulting Order Book Situation

Buy		Auction		Sell		
Cum. Quantity	Surplus	Price	Surplus	Cum. Quantity	Max Exec Volume	Surplus
200	0	207	0	200	200	0
200	0	201	0	200	200	0

The potential auction prices are 201 and 207 EUR. There is no surplus side to determine the auction price. The reference price is taken to find the correct auction price. Since the reference price is not a potential auction price, the nearest potential prices below (201 EUR) and above (207 EUR) the reference price are taken into account for further evaluation. The reference price is exactly in the middle of 201 and 207. In such cases the auction price is determined as the potential auction price above the reference price: 207 EUR.

2.2 Top-of-the-Book (TOP) Order

By entering a Top-of-the-Book (TOP) Order, a trader ensures that this order is either placed on top of the order book narrowing the current order book spread or is rejected. However, execution against Hidden Orders within the order book spread is possible. These rules ensure that the execution of a TOP order is always treated as passive in the billing process.

A Top-of-the-Book Order will be accepted and added to the order book if its limit is narrowing the current order book spread, i.e. if the limit of a buy (sell) TOP order is greater (smaller) than the best visible bid (ask) in the order book and smaller (greater) than the best visible ask (bid).

Incoming TOP orders may also be fully or partially executed against sitting Hidden Orders similar to the already existing Book-or-Cancel Order. A full execution of the TOP order is possible, if in case of a buy (sell) TOP order its limit is greater (smaller) than the best visible bid (ask) limit in the order book and greater (smaller) than or equal to the limit of the Hidden Order on the ask (bid) side. If the incoming TOP order can only be partially executed against a sitting Hidden Order it is additionally checked that the limit of the buy (sell) TOP order is smaller (greater) than the best visible ask (bid) limit. If this is the case the TOP order will be executed partially and the remaining quantity is placed in the order book. Otherwise there is no execution of the TOP order and the order is rejected.

A Top-of-the-Book Order can only be entered via Enhanced Transaction Solution interface and is a limit order having the field "timeInForceCode" set to "8". The entry via VALUES API, J-Trader GUI or the new FIX Gateway is not supported.

A TOP Order is only accepted in Continuous Trading but not in auctions or volatility interruptions to guarantee the passiveness in the billing process. Consequently TOP orders in the book are deleted as soon as an auction or volatility interruption is triggered.

2.3 Cross Request

Currently, crossings as well as pre-arranged trades according to the pre-requisites defined in the rules and regulations of FWB are prohibited in the Xetra order book. A crossing is here defined as intentional or unintentional execution of orders and quotes with proprietary accounts of the same member during continuous trading. Crossed trades are today marked as market price.

With Xetra Release 12.0, a Cross Request will be introduced which is in line with the feature already in place at Eurex. Through the Cross Request, all participants are informed that a crossing or a pre-arranged trade shall be executed in the Xetra order book. Within a time span to be determined in the FWB rules and regulations, the originator of the Cross Request enters the orders designated to initiate the crossing or pre-arranged trade. However, there is no guarantee that these orders will in fact be executed against each other. Any other participant, who has been informed by the Cross Request, can enter orders in the order book which in turn can be executed against the orders designated for the crossing. With introduction of the Cross Request, the execution of orders of the same member always generates an exchange price.

To enter a cross request new VALUES API and Enhanced Transaction Solution requests as well as a new window in Xetra J-Trader are introduced. Once entered the existence of a cross request is disseminated to the market via the inside market data stream in VALUES API and Enhanced Broadcast Solution. Inquiries of cross requests are not supported.

Intentional crossings and pre-arranged trades without prior Cross Request remain prohibited.

2.4 Enhancements for Auction Prices without Turnover

The auction price without turnover is offered in the trading model Continuous Trading. It will be determined as midpoint of the existing best bid and ask limits in the Xetra order book at the end of the Closing Auction if there has been no turnover in a particular instrument on Xetra on a that trading day. For the determination of the midpoint, currently only visible limit orders and quotes in the order book are considered within the price corridor that does not trigger a volatility interruption.

This auction price without turnover is used by investors as evaluation basis for their positions. This feature is currently used only for Exchange Traded Funds (ETFs) and Exchange Traded Products (ETPs). Since it can be assumed that a Designated Sponsor who is active in an ETF or ETP knows the fair value of the instrument and considers it for his quoting, this feature is enhanced in the following way with Xetra Release 12.0: Auction prices without turnover are determined in the closing auction even if the price would trigger a volatility interruption as long as there is a two-sided quote of the contractual Designated Sponsor in the order book. Through this procedure, the probability of an evaluation price being determined is increased.

If no two-sided Designated Sponsor quote is in the order book at the end of the Closing Auction, an auction price without turnover will only be determined if it would not trigger a volatility interruption.

2.5 Quotes using Designated Sponsor Account

The entry of quotes with the Designated Sponsor account will be supported for all members and users in Xetra Frankfurt. A dedicated license assignment is only necessary for instruments where an Auction Price without turnover should be determined even outside the volatility ranges (see 2.4). The contractual role of a Designated Sponsor and the respective performance measurement is untouched by this functional change.

2.6 Clearing Member Stop Button

The Clearing Member Stop Button enables Clearing Members to declare in an automated manner that they no longer consent to process the transactions of their Non-Clearing Members, if the latter exceed their agreed trading limits. Clearing Members can thereby stop the trading activities of their Non-Clearing Members. Once the Clearing Member has applied the Stop Button, all orders and quotes of the Non-Clearing Member concerned are deleted and entry of new orders and quotes is prevented. The entry or approval of OTC trades is no longer possible for the Non-Clearing Member and also trade modifications are not allowed anymore.

If the Clearing Member revokes the stop, all functionality can be used again by the released Non-Clearing Member.

The Stop Button functionality affects CCP-eligible and non-CCP-eligible instruments. Therefore, this feature is only enabled for the Clearing Member if it is at the same time the Non-Clearing Member's Settlement Institute or if a declaration by the Settlement Institute to the Clearing Member exists which authorises usage of the Stop Button by the Clearing Member also for non-CCP-eligible instruments.

The Non-Clearing Member will be informed about his status changes via a new private VALUES and Enhanced Transaction Solution Broadcast.

2.7 Multi Exchange Capability

Xetra is used by many exchanges and for many markets. But in the same environment, a given ISIN can currently be traded only once. With introduction of Multi Exchange Capability as an integral part of Xetra Release 12.0, the ISIN can be traded multiple times in the same environment, however only once per market. Now, to address a certain instrument it will become necessary to specify the respective market in addition to the instrument's ISIN, WKN or Mnemonic. Via VALUES and J-Trader GUI a market is defined at application logon. This market together with the ISIN uniquely defines the instrument. In addition VALUES broadcasts will be extended by the instruments' market information.

However, the ISIX as instrument key will remain unique per instrument and per environment. In order to address a certain instrument via Enhanced Transaction Solution still the ISIX is used.

The usage of trading and settlement calendars for various exchanges and markets in the same environment is currently limited as well. With Xetra Release 12.0 it will become possible to define different trading and settlement calendars per market.

The new trading phase Holiday ("HOLI") will be introduced for instruments where the actual trading day is a holiday and hence no trading is supported in Xetra.

2.8 Flexible Trading Times in Trading Model “Continuous Auction“

In trading model Continuous Auction the capability of handling single market segments in one environment is improved. Today all instruments with this trading model follow the same general trading schedule from Start of Trading until End of Trading. Only the Call or the Freeze phase exist individually per instrument. With Release 12.0 it will become possible to have different general trading schedules as well as maximum durations regarding Call and Freeze phase for instruments in Continuous Auction. E.g. Scoach instruments will follow the same trading schedule as today while other instruments in Xetra Frankfurt 2 are going to have a different schedule.

2.9 Discontinuing unreliable Order and Quote Broadcasts

With Xetra Release 12.0 the private unreliable broadcasts “All Order Confirmation” and “Quote Confirmation”, i.e. the VALUES broadcast streams “O” and “R” will be discontinued. This measure ensures that the performance for non-persistent orders as well as quotes is further improved.

The private recoverable broadcasts “Order Confirmation” containing additions, modifications, executions and deletions of persistent orders (stream “B”) as well as the “Matching Event” (stream “M”) for the executions of persistent and non-persistent orders as well as quotes will still be available.

2.10 New Order Number Concept

Today in Xetra the system order number and the execution priority of an order or quote is changed every time an order parameter is modified in a way that the new value would impact the execution probability of other orders, e.g. changing the limit of an order.

With the new release the execution priority of an order is still adapted in such a case but the system order number will not be changed anymore. The system order number given to the order during order entry will stay the same over the whole lifecycle of the order.

A quote entered into the Xetra trading system will inherit the system order ID of the previous quote if the quote entry replaces a still existing quote in the order book.

2.11 Common Report Engine

With Release 12.0, Xetra introduces a Common Report Engine service, enabling centralised provision of reports analogously to the service offered for Eurex with Release 13.1. This service is based on a secure ftp (report) server and offers Members to retrieve all of their reports from a single source. The service is provided independent from the MISS servers in place, allowing Members to use their preferred hardware platforms and preferred operating systems. Re-use of currently used network connections with already set up ftp channel is considered. During the introduction phase of the Common Report Engine service it will be provided in parallel to the existing report distribution mechanisms.

2.12 Import of External Reference Prices

Further to the features outlined above, Xetra Release 12.0 supports integration of current order book information from a reference market through an external reference price stream. This feature will not be active as of the start of Xetra Release 12.0.

3 Xetra 12.0 as a Cornerstone of the Interface Strategy

As announced in September 2010, Deutsche Börse will introduce two new interfaces as part of its interface strategy. Implementation of a standardised FIX interface for order management and trade capture, providing easier access to Xetra for the Members and a new Xetra Market Data Interface for netted market data in multicast format will take place with Xetra Release 12.0.

Development of both interfaces is part of the IT strategy of Deutsche Börse Group. The new interfaces will enable Eurex and Xetra customers to adapt their own trading applications in good time. The new interfaces will replace the current VALUES API open interface in the medium-term. In order to minimise costs for the Members, both interfaces will be launched as part of the annual system releases in November 2011 with Eurex Release 14.0 and Xetra Release 12.0. Along with this, Deutsche Börse plans to considerably simplify its existing access structure for customers and plans to offer a web-based.

Further to the two new interfaces the scope of features provided by the currently offered interfaces Enhanced Transaction Solution and Enhanced Broadcast Solution will be extended.

User administration will still be supported via VALUES API and J-Trader GUI.

3.1 Xetra FIX Gateway

The Financial Information eXchange (FIX) protocol has become the new standard of the financial industry for pre-trading and trading communication.

As part of Deutsche Börse Group's interface strategy, planned to facilitate participant access to Xetra and to enable participants to decommission the MISS architecture in the medium term, Xetra will offer a standard FIX interface supporting FIX versions 4.2 and 4.4 in the course of Xetra Release 12.0.

The Xetra FIX Gateway supports mainly two functional blocks:

- order handling
- trade capture on member level

The context for all order related messages will be the FIX session, i.e. only orders entered by the corresponding FIX session will be maintainable. At start of business day all active orders will be transmitted via the respective FIX session. The messages will be transmitted using the FIX Execution Report.

The context for all trade capture messages will be the Xetra member. All trade information the member is authorized to see will be provided within one stream. This feature includes for a clearing member (or settlement institute) the provision of all trade information of all of its non-clearing members.

Customers will use dedicated FIX sessions in the context of Order handling and Back-office.

The Xetra FIX Gateway will support Client Order ID chaining. In FIX it is a standard that the Client Order ID changes on every request. FIX customers use the Client Order ID to track each individual request. E.g. when sending a Replace Request for an order in FIX, one has to generate a new client Order ID for the cancel request. This way the FIX customer is able to find and track individual requests by their Client Order ID.

For a member it will be supported to have access to different Xetra markets via the same FIX session.

In order to support emergency procedures at the member site, the deletion of orders entered via FIX gateway will additionally be supported via the Xetra J-Trader GUI.

3.2 Xetra Market Data Interface

With Xetra Release 12.0, a new market data interface for distributing order book information in multicast format, aggregated and netted on price level, will be provided. The interface contains Snapshot and Delta information with a market depth of 5 price levels.

This new interface for netted market data will use FIX via FAST with only low requirements for bandwidth.

Currently netted market data in Xetra is only provided via VALUES API. The Enhanced Broadcast Solution offers only un-netted market data and requires Ethernet infrastructure with bandwidth requirements from 10 up to 50 MBit/s.

In order to provide a low-footprint and low bandwidth solution for customers who plan to migrate from VALUES API, the new Xetra Market Data Interface containing netted market data will be introduced in the course of Xetra Release 12.0.

Xetra Market Data Interface is a UDP based interface which disseminates market data over a multicast network. The used messaging protocol is fully compliant to the Financial Information eXchange (FIX) protocol version 5.0 and will have customized message formats fitting to Xetra business requirements. The Xetra Market Data Interface conforms to the FAST (FIX Adapted for Streaming) protocol version 1.2 principles for efficient bandwidth utilization.

Information will be disseminated in form of broadcast streams. From these broadcast streams, members will be able to receive the information that meets their requirements. The interface is designed in a way that members will only receive information for streams they have joined.

In addition to Inside Market information disseminated via the Snapshot and Delta stream (including trade price information), Ticker Information and State Change information is supported via dedicated streams.

No dedicated trade price stream and no reference data stream is provided via Xetra Market Data interface. The reference data including the multicast-addresses can be derived from the ascii reference data file that is available on Deutsche Börse homepage.

The Xetra Market Data Interface will be supported in parallel to the public market data dissemination via VALUES API and the Enhanced Broadcast Solution interface.

3.3 New Features for the Enhanced Transaction Solution Interface

Beside the functional enhancements described above which are also provided via Enhanced Transaction Solution interface, the scope of features of this interface will be extended with the following new functionality in the course of Xetra Release 12.0:

3.3.1 Trade Notifications on Member Level (subscription)

A new trade notification broadcast will be introduced for Enhanced Transaction Solution with Release 12.0 to allow members to subscribe all trades in the following role:

- as a Trading Member
- as a Clearing Member (related only to CCP trades)
- as a Settlement Institute (related only to non-CCP trades)

Unlike the current implementation in Xetra VALUES API, Clearing Members and Settlement Institutes shall be able to receive all required data with the help of one single subscription request. No subscription per trading member shall be required anymore.

All trade messages the member is authorized to receive will be included in one trade capture stream and one sequence number range. It will not be able to subscribe for a subset of trade data; thus member applications need to sort and filter trade data internally.

A recovery mechanism will be provided in order to enable members the retrieval of missing data.

The client order ID is added to the trade notification. This will allow members to map their trade notification more easily to the underlying order.

3.3.2 Optional Receipt of Event Notifications (subscription)

A new "Session Logon" parameter will enable members to opt for the receipt of recoverable Order Status Notifications on session level with Xetra Release 12.0. The recoverable Order Status Notifications (TM Event Notification) may not be required by the member application, since the same or equivalent information is provided alternatively via the direct response (TM Response Notification) and the TM Information Notification in correct functional sequence but unreliably.

In case a session has not subscribed to recoverable Order Status Notifications (TM Event Notification), the messages may still be requested via retransmission.

In order to minimize impact on member side, the default for a session will be the receipt of recoverable order status notifications.

Xetra Release 12.0 will guarantee the correct sequence of events in the recoverable (event) notifications.

In addition both text fields will be integrated into the order status notification.

3.3.3 Cancel on Disconnect for Persistent Orders

To provide members with the same level of flexibility and protection against unforeseen circumstances in case of Session Loss/Logout, the Cancel-on-Disconnect functionality, which already exists for non-persistent orders and quotes, will be extended to also cover persistent orders.

3.3.4 Support trading model Continuous Auction

Order handling for the Continuous Auction trading model will be supported via the Enhanced Transaction Solution interface.

Dedicated Market Maker and Specialist functionality of the Continuous Auction trading model will still only be supported via VALUES API in the course of Xetra Release 12.0.

3.3.5 Support Xetra BEST

Order and Quote Maintenance will be supported for Xetra BEST.

3.3.6 OTC trading and Trade Reporting

A new OTC trade entry facility will be provided in Enhanced Transaction Solution interface. Using the respective messages it will be possible to add, delete or approve OTC trades and to enter, cancel, amend or confirm MiFID trade reports. Furthermore, the member can receive all open OTC trades which he needs to approve via a new OTC broadcast.

3.3.7 Order Inquiry on Session Level

The response to the Inquire Order or Quote Status Request is going to provide all orders or quotes belonging to the session where the inquiry is send from. Optionally it will be possible to filter for a trader subgroup.

3.3.8 Support Order Deletion via GUI

In order to support emergency procedures at the member site, the deletion of orders entered via Enhanced Transaction Solution will be supported using VALUES API or the J-Trader GUI.

3.4 Extensions of the Enhanced Broadcast Solution Interface

Beside the functional enhancements described above with an effect on Enhanced Broadcast Solution interface, there are further changes in the scope of this interface introduced with Xetra Release 12.0:

3.4.1 Supported Backends

With Xetra release 12.0 the Enhanced Broadcast Solution interface will be provided for Xetra Frankfurt 2 as well.

3.4.2 Enhancement of Reference Data message

The Reference Data stream within the Enhanced Broadcast Solution interface will be enhanced with the complete relevant instrument reference data.

3.4.3 Ticker Stream

A new stream will be introduced for Ticker data with Xetra Release 12.0 via which index information will be send to the members.

3.4.4 Enhancement of Version Information Message (Packet Header)

Due to the fact that the length of the packet header is not fixed, applications are currently required to decode each packet header of Enhanced Broadcast Solution messages in order to verify completeness of data via source A and B and to detect duplicates. In addition sequence numbers are currently generated per source id which means that all broadcast groups have to be subscribed to in order to ascertain packet loss.

With Xetra Release 12.0 the version number field "versNo" in the Version Information Message has been removed. The version information can be derived from multicast address and port number. Additionally, the sequence number is defined as fixed length with Xetra Release 12.0. So each packet header has now always a fixed length of 14 bytes. Thus it can easily be used to detect duplicates or a loss of a datagram.

In Xetra Release 12.0 the Packet Header will enhanced with the following fields:

Template ID - Will contain a fixed value to indicate that this is the packet header.

Source ID – Unlike the current implementation this field will contain sequentially incrementing value unique for each instance of a broadcasting process which will not fallback intraday.

Packet Sequence Number – Incremented for every message sent via the Enhanced Broadcast Solution. Applications can used this filed combined with the Source ID to determine whether the packet in question has already been received and hence discard duplicate packets quickly without having to first decode them.

Dispatch Time - this is the time when the broadcasting process actually dispatches the message onto the network.

IMPORTANT: Due to the changes in the Packet Header of the Enhanced Broadcast Solution ALL feed handlers must be modified to support the new format.

4 Technical Implications

Xetra Release 12.0 will be a mandatory release without backwards compatibility.

Please be aware that all Members have to install the (update) kits on their existing and new MISS servers or workstations. By means of these kits, the Xetra Release 12.0 software with the latest version of the Xetra J-Trader GUI will be installed.

For Xetra Release 12.0, installation of GATE 3.5 and the corresponding GATE 3.5 Update Kit 3 is required, as has been for Xetra Release 11.1.

Existing own or third-party applications using VALUES API, Enhanced Transaction Solution Interface or Enhanced Broadcast Solution Interface have to be adjusted.
