T7 Release 7.0

Final Release Notes Xetra

Date   18 October 2018

Content

1. Introduction

Deutsche Börse AG is planning to launch Release 7.0 of its T7 trading platform on 3 December 2018.

The following diagram gives an overview of the introduction schedule:
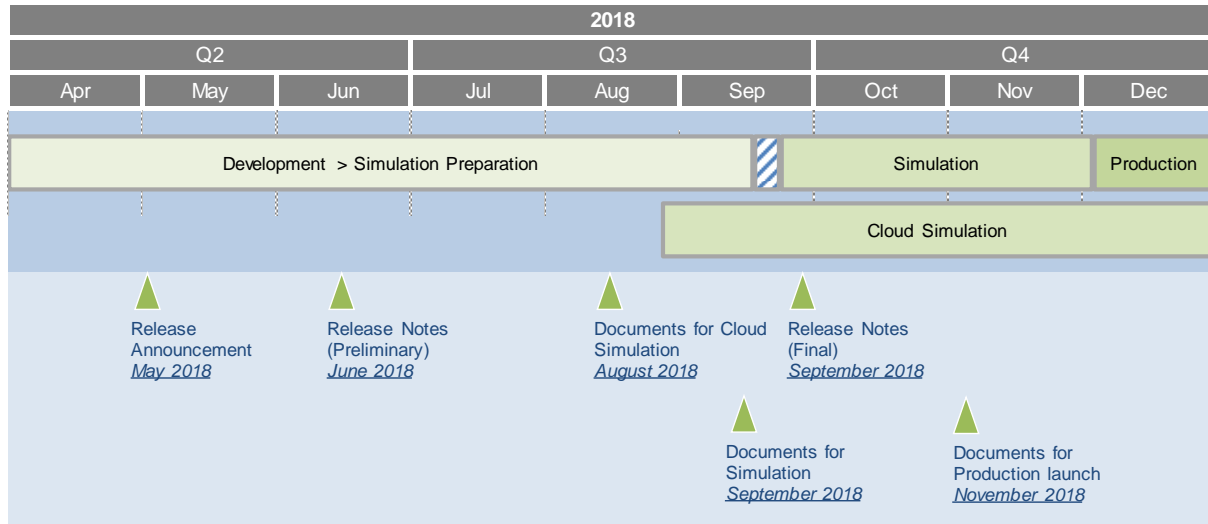
Deutsche Börse AG provides a dedicated release simulation environment in order to give trading participants the opportunity to perform comprehensive testing of their trading applications, independent from the T7 production environment. The simulation period for T7 Release 7.0 is planned to start on 24 September 2018.

In addition to the T7 release simulation, Deutsche Börse AG offers the T7 Cloud Simulation in Release 7.0 to allow trading participants and Independent Software Vendors (ISVs) to test against the current T7 production and simulation software versions. In the Cloud Simulation, participants can initiate predefined market scenarios and test specific strategies more easily than in a shared environment. The Cloud Simulation is available around the clock for a fixed price per hour and will start in advance to the usual simulation for the T7 Release 7.0. For more information on the T7 Cloud Simulation, please refer to http://www.xetra.com/xetra-en/technology/t7/cloud-simulation.

1.1 New Features and Enhancements Overview

The following new features and enhancements will be introduced with T7 Release 7.0:

- Introduction of T7 Entry Service (TES)
- Introduction of a new Trading Restriction "Intraday Auction Only"
- Enhancements of Quote Functionality
- Data Format Change of Quantity Fields to 8-byte Fields with 4 Decimals
- Removal of Connection Gateways

Note on Interfaces

T7 Release 7.0 will provide backwards compatibility for the T7 ETI interface version 6.1, i.e. participants who do not want to use the new functionality will still be able to connect to T7 with the interface layout version 6.1 even after production launch of T7 Release 7.0.

The T7 FIX Interface, market and reference data interfaces will **not** provide backward compatibility to the previous releases.

1.2 Further Reading

The existing documents have been or will be revised for T7 Release 7.0 The following table provides an overview of the final schedule for the publication:

T7 Release 7.0	Eurex	Xetra	Combined	Q1 2018			Q2 2018			Q3 2018			Q4 2018		
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Release Notes															
T7 Release 7.0, Release Notes	X	X							◆			●			
Simulation															
Participant Simulation Guide			X									●			
Overview and Functionality															
T7 Functional and Interface Overview			X									●			
T7 Cross System Traceability			X									●			
T7 Functional Reference			X									●			
T7 Incident Handling Guide			X									●			
Participant and User Maintenance Manual	X	X										●			
Contract Notes Description		X										●			
Known Limitations			X									■		●	
GUI Solutions															
Trader, Admin and Clearer GUI – User Manual	X	X										■		●	
T7 Trader, Admin and Clearer GUI – Installation Manual			X									■		●	
Trading Interfaces															
T7 Enhanced Trading Interface – Manual incl. Repository and Header			X								◆	■		●	
T7 Enhanced Trading Interface – XML Representation			X								◆	■		●	
T7 FIX Gateway - FIX 4.2 and 4.4 Manual incl. Fiximate and			X								◆	■		●	
Market and Reference Data Interfaces															
T7 Market-, Enhanced Order Book- and Reference Data Interfaces, Manual incl. Fast Message Template, Repository & FIXML Schema Files			X								◆	■		●	
Xetra Instrument Reference Data Guide		X										●			
T7 Extended Market Data Services – Manual incl. Fast Message Template and Underlying Ticker Data			X									■		●	
Reports															
XML Reports - Reference Manual	X	X										■		●	
Common Report Engine User Guide			X										●		
Network Access															
N7 Network Access Guide			X									●			
Rules & Regulations															
Xetra Rules & Regulations		X												●	

◆ - cloud-simulation / preliminary version

■ - simulation / preliminary version

● - production / final version

The documents will be available on the Xetra website www.xetra.com under the link:

> Technology > T7 Trading Architecture > System documentation > Release 7.0

Please note that the outlined schedule is preliminary and subject to change.

1.3 Contacts

If you have any questions or require further information, please contact your Global Key Account Manager Trading. Alternatively, please contact your Technical Key Account Manager using your VIP number or via e-mail to: cts@deutsche-boerse.com.

1.4 Definitions and Abbreviations

Term/Abbreviation	Description
BU	Business Unit
CCP	Central Counterparty
CWG	Connection Gateway
DBAG	Deutsche Börse AG
EMDI	T7 Enhanced Market Data Interface
EMDS	T7 Extended Market Data Service
EOBI	T7 Enhanced Order Book Interface
ETC	Exchange Traded Commodity
ETF	Exchange Traded Fund
ETI	T7 Enhanced Trading Interface
ESMA	European Securities and Markets Authority
FIX	Financial Information eXchange (portal)
GUI	Graphical User Interface
IAO	Intraday Auction Only
ISV	Independent Software Vendor
LIS	Large in Scale (new TES Type for on-exchange off-book trading)
MDI	T7 Market Data Interface
MiFID	Markets in Financial Instruments Directive
MiFIR	Markets in Financial Instruments Regulation
OTC	Over-the-Counter (TES Type for off-book trading in T7)
PAG	Product Assignment Group
RDF	T7 Reference Data File
RDI	T7 Reference Data Interface
T7	T7 is the trading architecture developed by Deutsche Börse Group
TES	T7 Entry Service
TVTIC	Trading Venue Transaction Identification Code
VDO	Volume Discovery Order
Xetra (Trading venue)	Trading venue with Market Identifier Code "XETR"
Xetra (System)	Xetra trading system

2. TES Functionality

T7 Release 7.0 will enable an OTC functionally for the trading venue "XETR". After the introduction, all trading activities (on-book/off-book) for the trading venue XETR will be consolidated in T7, as a single state-of-the-art trading platform.

Trading participants and ISVs who want to use OTC functionality in T7, i.e. the T7 Entry Service (TES) functionality, will have to use the T7 ETI/FIX interface layout version 7.0. It will also be possible to use the TES functionality via the T7 Trader GUI with T7 Release 7.0. The TES functionality is planned to be available on 5 December 2018 (see also chapter 2.1.1.3).

The following chapters describe the TES concept for XETR on T7. Detailed information will be provided with the document "Functional Reference" for T7 Release 7.0[1]. Prior to that, further information can be found in the document "Functional Reference" of T7 Release 6.1 describing the overall TES functionality of the T7 trading architecture. The main differences in the TES functionality compared to Eurex will be in the possibility to only do bilateral TES trades, price/quantity validations, TES Types (OTC/LIS for on-exchange off-book), Auto Approval functionality, and in the publication of TES Trades.

2.1 Functional Description

2.1.1 User Concept and Migration of User Entitlement

The TES functionality on T7 will use the existing participant, business unit (BU), user and session concept. Please refer to the "Participant and User Maintenance Manual" on the Xetra website[2] if needed.

2.1.1.1 TES Users

Every TES entry request must carry the identifier of the initiating user, i.e. a natural person who is legally responsible for the TES entry. In addition to the identifier of the initiating user, the TES entry has to include the TES identifier of the approving users, i.e. the natural persons who are legally responsible for the side approval. However, each TES side will only include the TES identifier of the initiating user and the TES identifier of one approving user, i.e. not receiving the information of other approving user. Only the initiating user can modify or delete a TES trade that he previously initiated but not yet approved by both approving users.

Once the initiating user enters the TES trade, the TES trade is assigned the status "pending". After approval of the TES trade, the status is changed to "approved".

A user with the trader role can only maintain his own TES trades. A trader may be given the level of a head trader or of a supervisor. If a trader has the level of a head trader, then he is allowed to

- delete pending TES trades of an initiating user belonging to the same trader (user) group or
- to approve TES sides for users belonging to the same trader (user) group.

Similarly, the supervisor may perform the described activities for the same business unit.

Please note that on-behalf TES Trade Entry and Modification by the head trader and supervisor will not be supported in T7.

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[1] See on the Xetra website www.xetra.com under the link: > Technology > T7 Trading Architecture > System documentation > Release 7.0 > Overview and Functionality.

[2] See on the Xetra website under www.xetra.com under the link: > Technology > T7 Trading Architecture > System documentation > Release 7.0 > GUI Solutions.

2.1.1.2 TES Activities & Roles

Roles are defined by grouping of the above activities. The following TES roles are supported:

- TES trader – A TES trader must be involved in the TES trade as one of the counter parties. A user who is assigned the TES trader role can enter a TES trade as an initiating user and then modify or delete that TES trade. A TES trader can act as an approving user and can approve his TES side.

- TES broker – A TES broker is not involved in the TES trade as a counter party. A user who is assigned TES broker role can enter a TES trade as an initiating user and then modify or delete that TES trade, but is not allowed to act as approving user and approve a TES trade.

- TES view – This role allows the user to view TES trades.

By default, each Xetra participant will receive the TES trader, the TES broker and the TES view role.

The following table shows the TES roles in combination with the resources:

Resource / Role	TES Trader	TES Broker	TES View	Cash Service Administrator	Cash User Data View
TES Entry (User can be part of TES Trade)	✔				
TES Broker (User can't be part of TES Trade)		✔			
TES Modify	✔	✔			
TES Delete	✔	✔			
TES Approve	✔				
TES View	✔	✔	✔		
Maintain TES Auto Approval Rule				✔	
View TES Auto Approval Rule					✔

Table 1: TES Roles and TES Activity

Please note that the setting "Broker allowed" given in the TES profile can restrict the broker activities with respect to a specific product – TES type combination (see chapter 2.1.16).

TES trading is only allowed for the current business day and in case any TES trades are not approved by both sides at the end of the day, they will be deleted automatically by the system.

The resources/roles in connection with the auto approval functionality will be described in the respective chapter for auto approval (see chapter 2.1.15).

2.1.1.3 Migration of Participant/User Entitlement for TES

The TES functionality for the trading venue XETR will be activated shortly after production launch on 5 December 2018. With production launch, participants will receive all relevant roles at business unit level. Afterwards, participants will be enabled to assign TES activity roles to individual users in their business unit. This will be similar to the roles' assignment procedure in the on-exchange area. The participants can change these settings (after connection test).

The detailed procedure will be as follows:

Business Unit (BU):

- Assignment of the new TES roles to all trading BUs for all assigned market groups (i.e. PAGs)
- Assignment of the new TES Types *OTC* and *LIS* to all trading BUs

User:

- All users of a trading BU will have TES roles assigned for the same market groups (PAGs) as for on-exchange trading. For example, if a user has the *Cash Trader* or *Cash Market Maker* role assigned, he will have the *TES Trader* role for the same market group. In case of *Trading View* role, he will have the *TES View* role assigned and in case of negative *Examination Role*, he will have the negative *TES Examination Role*.
- The *TES Broker* role will not be assigned automatically.
- If a user has the *TES Trader* role assigned to at least one PAG, he will have both TES Types (*OTC/LIS*) assigned.

2.1.2 Instrument Identifiers

T7 supports TES trading in simple instruments (e.g. equities, Exchange Traded Funds (ETFs), Exchange Traded Commodities (ETCs)). The source of instrument identifiers for on-book and off-book trades will be the same, i.e. they will be provided as today via Xetra RDI or via the Xetra RDF at the beginning of the trading day.

2.1.3 TES Activity Status

The TES activity status for a product determines which off-book activities are allowed in the product. The following values for the TES activity status exist:

- **On** - When the TES activity status is "On" for a product, then TES trade entry, TES trade modification, TES trade deletion and TES trade approval are allowed for all the instruments of the corresponding product.
- **Ended** - The TES activity status "Ended" terminates the TES trading session of a business day. All still pending TES trades are automatically deleted during the transition to the TES activity status Ended. Further TES trade entry is not possible anymore.
- **Off** – The TES activity status "Off" indicates that the product is no longer available for TES trading or TES trading has not been started for the day. In this case, all TES activities are disabled for the product.

- **Halted** – The TES activity status "Halt" is reserved for emergency situations. Market Supervision may set the TES activity status to Halted for a product if they judge that market conditions or technical conditions impair the integrity of the market. In this state TES trade entry/modification/approval and deletion are not allowed. Pending TES trades remain when the TES activity status is Halted

Figure 1: On-Exchange Product States and TES Activity Status

In addition to the TES Activity status, the instruments' TES status controls in principle if the instrument is available for TES trading or not. The instruments' TES status can be "Active", "Inactive" and "Suspended". The TES Activity status and the instruments' TES status can be switched independently from each other.

Please note that an instrument is also characterized by its already existing on-exchange instrument status supplementing the instruments' TES status.

Please refer to the document "Functional Reference" on the Xetra webpage for more details.

2.1.4 Bilateral and Multilateral TES Trades

In general, T7 supports bilateral and multilateral TES trades. While a bilateral TES trade is an off-book trade executed between exactly one buyer and one seller, a multilateral TES trade is an off-book trade executed between one or several buyers against one or several sellers.

For the trading venue XETR only bilateral TES trades will be activated.

2.1.5 Crossed TES Trades

In case of crossed sides, i.e. opposite buy and sell sides are in the same business unit, at least one of the TES side has to have the trading capacity of "Agency".

2.1.6 TES Trade Identifiers

On each TES trade entry, the following identifiers will be generated by T7 automatically:

- The TES trade identifier
  When a trader or a broker has successfully entered a new TES trade in T7, the system will assign a unique TES trade identifier (*PackageID*) to the newly entered and pending TES trade. The *TES ID* will be guaranteed to be unique among all TES trades in the same product on the same business day. The *TES ID* will be communicated to the initiating user and to all approving users via the TES broadcast.

  The initiating user will be able to identify the TES trade using the *TES ID* in order to delete or modify the TES trade.

- The TES side identifier
  When a new TES trade was successfully entered in T7, the system will assign to each side of the TES trade a TES side identifier (*IndividualAllocID*). The *TES Side ID* will be guaranteed to be unique among all TES sides in the same product on the same business day. The *TES Side ID* will be communicated to the corresponding approving user via TES broadcast.

In order to approve a TES side, the approving user has to specify the *TES ID* and *TES Side ID*.

After approval of the TES trade, (see chapter 2.1.14 for workflow), T7 will provide the *SideTradeID* (ETI/FIX) and *SideTradeReportID* (FIX) in the TES trade notifications (which are equivalent to *TradeID* in CCP). These TES trade identifiers for off-book trading will be both unique per product and business day.

2.1.7 TES Types

T7 will support the following services for the cash market, henceforth referred to as TES types (*TrdType*):

- TES Type LIS
  New TES type *LIS* will be introduced to support execution of pre-arranged trades (on-exchange off-book trade entry). On entry, several validations will be conducted, e.g. quantity and price validations. After approval, the TES trade will be published with a delay via EMDS. The deferred TES trade publication will be performed according to MiFID/MiFIR requirements.

- TES Type OTC
  Supports as of today bilateral off-book trading in simple instruments. For this TES type, neither price/quantity validations nor publication of the TES trades will be performed.

2.1.8 TES Trade Price

The TES trade price (*LastPx*) must be provided by the initiating user when entering a TES trade. Depending on the TES type, there will be either a price validation or not. Only for TES type *LIS*, there will be a price validation against a range around the last trade price. If the price is outside the range, then the TES trade will be rejected with a corresponding error message.

Apart from being in the expected price range, the price provided in each TES trade is validated to be in accordance to the specific TES price step table of the relevant instrument[3]. A TES price step table defines price intervals and the size of the price step for each price interval. Inside each price interval, valid TES prices are those that can be obtained by adding an integer multiple of the price step to the lower end of the price interval. Price steps are always integer multiples of the tick size, and therefore, valid TES prices are always integer multiples of the tick size however not every multiple of the tick size is a valid TES price.

The price of the TES trade entered by the initiating user will also be communicated to the approving user in the TES broadcast along with the *TES ID* and *TES side ID*. The TES trade price can only be changed by the initiating user and then the TES trade needs to be again approved by all the approving users. The approving user cannot change the TES trade price.

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[3] The TES price step table of an instrument may be different to the on-exchange price step table.

A TES trade price validation for TES Type *OTC* will not be performed.

2.1.9   TES Quantity Validations

The initiating user must provide the TES trade quantity (*AllocQty*) for the buy and sell side. Depending on the TES type, there will be TES quantity validations for each approving trade side or not. While for TES type *OTC*, no quantity validation will be in place at all, for TES type *LIS*, there will be the following validations:

- Maximum Order Value *(ValueCheckTypeValue)*: This check is already in place for on-exchange trading and will also be applied to TES trades. On entry, the TES price multiplied with the TES trade quantity has to be lower or equal to the Maximum Order Value given on the user level. If the validation fails then the TES trade approval will be rejected for the corresponding approving user.
- Maximum Order Quantity (*ValueCheckTypeQuantity*): This validation is currently part of on-exchange trading and will be applied to TES trades as well. The pre-defined Maximum Order Quantity on the user level has to be lower or at maximum equal to the TES trade quantity.
- Large in Scale Value *(preTradeLISValue)*: This parameter will be first introduced with T7 Release 7.0 and will replace the existing parameter *VDOMinExecutableVolume* used for Volume Discovery Orders. On TES entry, TES trade price multiplied by the (side) quantity has to be at least equal to or higher than the *preTradeLISValue*. Depending on the difference to this value, the delay for the TES trade disclosure will be determined.

For each TES trade, the quantity entered by the initiating user will also be communicated to the approving user in the corresponding TES broadcast along with the *TES ID* and *TES Side ID*. The TES trade quantity can only be changed by the initiating user. If the TES trade quantity is changed by the initiating user, then each approving user who is part of the TES trade will again need to again approve their TES trade side. The approving user cannot change the TES trade quantity.

2.1.10   TES Trade Posting

Xetra TES trades of the type *LIS* will be published via T7's market data interface EMDS. TES trades with TES type *OTC* will not be published. For TES trades with TES type *LIS*, the publication may be deferred according to MiFID/MiFIR requirements.

2.1.11   Trade Description

The initiator of a TES trade may give a hint to the counterparties about the background of the trade by a new description field (*TradeReportText*). The approving user will not be able to modify the text description field.

2.1.12   TES Trade Specific Timestamps

The following times will be relevant for TES trade entry and approval in T7.

2.1.12.1   Time of Commencement

The time of commencement (*TransBkdTime*) is the actual time when the off-book trade has been agreed outside T7 before the physical entry of the TES trade takes place. The time of commencement has to be specified by the initiating user. If the initiating user does not provide it, the TES trade will be rejected.

In case the time of commencement is equal to or greater than the TES entry time (*TransactTime*) or is from a previous day, the TES trade will be rejected.

After a successful entry of a TES trade, the time of commencement will be visible to all approving users involved in the TES trade. Since the time of commencement cannot be modified by the approving user, the approval of a TES trade always implies that the time of commencement is accepted by the approving user. In case the approving user disagrees with the time of commencement entered, he should not approve the TES trade implying that the TES trade is never acknowledged, i.e. ratified.

2.1.12.2 TES Entry Time

When a TES trade is entered on T7, it will be assigned a TES entry time (*TransactTime*). The TES entry time will be applied to all approving users of TES trade.

2.1.12.3 Side Approval Time

Whenever a side of the TES trade is approved by the approving user, then that time of approval (*TransactTime*) will be recorded as the side approval time for the corresponding side.

2.1.13 Other Attributes

Several TES attributes, which need to be filled by the approving trader, are not directly relevant to TES trading but serve other purposes, e.g. in the post-trade processing, or to satisfy regulatory requirements. These are:

- The *Trading Capacity* is a mandatory attribute which contains the trading business type (agency, proprietary, market making, riskless principles),

- Free format text fields (optional),

- MiFID II related attributes like Client ID (*PartyIDClientID*), Execution ID (*ExecutingTrader* - short code for a natural person or Algo ID) and Execution Qualifier (*ExecutingTraderQualifier*) covering the ESMA field "execution within firm", Investment ID (*PartyIdInvestmentDecisionMaker* - short code for a natural person or Algo ID) and Investment Qualifier (*PartyIdInvestmentDecisionMakerQualifier*) covering the ESMA field "investment decision within firm", and Liquidity Provision Activity (*OrderAttributeLiquidityProvision*).

- The Settlement Date can be at least one day after the current business day but not more than T+89 days.

2.1.14 TES Trade Maintenance/Workflow

2.1.14.1 TES Trade Entry and Approval

After a TES trade entry by the initiating user, the status of all its sides will be set to *Pending* (*TradeAllocStatus*) including the TES trade side owned by the initiating user.

TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
A Bilateral TES Trade is entered by the **Buyer A** as Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A	ENTER	Pending
1	2	Approving User	TES Trader	Seller B	ENTER	Pending

or

A Bilateral TES Trade is entered by the **Seller B** as Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Seller B		
1	1	Approving User	TES Trader	Seller B	ENTER	Pending
1	2	Approving User	TES Trader	Buyer A	ENTER	Pending

or

A Bilateral TES Trade is entered by the **Broker C** as Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Broker	Broker C		
1	1	Approving User	TES Trader	Buyer A	ENTER	Pending
1	2	Approving User	TES Trader	Seller B	ENTER	Pending

During the approval of its TES trade side, the approving user has to submit its own clearing information which includes the attributes as described above in section *2.1.13*. Once a side is approved by the approving user, the status of that side will be set to *Approved* and it will be marked with the *side approval time* (*TransactTime*). Each approving user can do the approval independently. There will be no check on the sequence of approval. As long as not all users have approved the TES trade, each side can do the approval again in order to modify the clearing attributes. The second approval of the approving user does not update the status as well as the *side approval time* (*TransactTime*).

The Bilateral TES Trade is approved first by the Approving User Buyer A who is also the Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A	APPROVE	Approved
1	2	Approving User	TES Trader	Seller B		Pending

or

The Bilateral TES Trade is approved first by the Approving User Seller B						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A		Pending
1	2	Approving User	TES Trader	Seller B	APPROVE	Approved

When the last remaining side is approved by the corresponding approver, the status of the TES trade is immediately ratified afterwards, i.e. the status of all sides is changed to *Executed*.

The Bilateral TES Trade is finally approved by the Approving User Seller B						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A		Approved
1	2	Approving User	TES Trader	Seller B	APPROVE	Approved
1	1	Approving User	TES Trader	Buyer A	EXECUTE	Executed
1	2	Approving User	TES Trader	Seller B	EXECUTE	Executed

Once fully approved (i.e. all sides are executed), the ratified TES trade is sent to the Central Counterparty (CCP) and each side receives a legally binding trade notification which confirms the conclusion of the TES trade. A TES trade cannot be modified or approved again once the status of the sides is changed to *Executed* and a trade notification was sent out.

2.1.14.2 TES Trade Modification

The initiating user can modify the TES trade details as long as the trade has not been ratified and the status of sides has not been changed to *Executed*. All the TES trade attributes including price, quantity and TES sides can be modified except the traded instrument. Modification of any TES attribute apart from TES description will be treated like a new TES trade entry. As a result, the *TES entry time* as well as the *side approval time* will be reset and the status of all sides will be changed to *Pending*, but the TES trade identifier will remain the same. Each of the approving users will be notified about the modification even if he has already approved his side. During TES trade modification all the attributes will be validated again as it is done for the *TES trade entry*.

- Modification of *TES trade price* and *time of commencement* – Each side will be informed about the modification and is required to fill (or refill) the clearing information and perform the approval again. The corresponding *TES Side ID* will be kept.

- Modification of TES trade quantity – When the TES trade quantity is changed, then the corresponding sides are informed about the modification along with the updated quantity and updated *TES entry time*. Each side is required to fill (or refill) the clearing information and perform the approval again. The corresponding *TES*

Side ID will be kept.

- Modification of TES sides by adding or deleting a TES side of the TES trade – When the initiating user submits a TES trade modification request with the original *TES Side IDs*, the involved traders keep their *TES Side ID*. If the initiating user submits a TES trade modification request where the *TES Side ID* is not included, then the corresponding side is considered as a newly entered side and receives a new *TES Side ID*. When an original *TES Side ID* is not sent back with the modify request, the corresponding side is deleted. For all sides, the approving time, the clearing information and the approving status are reset to *Pending* irrespectively of the previous approval status. All approving users are then informed by a TES broadcast that they have to approve again their side(s) and to fill (or refill) their clearing information.

A Bilateral TES Trade is entered by the **Buyer A** as Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A	ENTER	Pending
1	2	Approving User	TES Trader	Seller B	ENTER	Pending

The Bilateral TES Trade is approved first by the Approving User Seller B						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	2	Approving User	TES Trader	Seller B	APPROVE	Approved
1	1	Approving User	TES Trader	Buyer A		Pending

The above Bilateral TES Trade is modified by the Initiating User A by Entering Seller as C and removing Seller B						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A	MODIFY	Pending
1	2	Approving User	TES Trader	Seller B	DELETE	Deleted
1	2	Approving User	TES Trader	Seller C	ENTER	Pending

2.1.14.3 TES Trade Deletion

Only the initiating user can delete the TES trade as long as the trade has not been ratified and the status of sides has not been changed to *Executed*. When one or several sides have already been approved, as long as there is still one pending side, the TES trade can be deleted. The initiating user and all approving users, independently of their previous side status (pending or approved), are informed of the TES Deletion by a TES broadcast.

Please note that in difference to the Xetra system, a deletion by the approving user is not possible.

A Bilateral TES Trade is deleted by the **Broker C** as Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Broker	Broker C		
1	1	Approving User	TES Trader	Buyer A	DELETE	Deleted
1	2	Approving User	TES Trader	Seller B	DELETE	Deleted

A multilateral TES Trade is deleted by the **Buyer A** as Initiating User						
TES ID	TES Side ID	User Character	Role	User Name	Activity	Side Status
1		Initiating User	TES Trader	Buyer A		
1	1	Approving User	TES Trader	Buyer A	DELETE	Deleted
1	2	Approving User	TES Trader	Seller B	DELETE	Deleted
1	2	Approving User	TES Trader	Seller B	DELETE	Deleted

2.1.14.4 TES Trade Reversal

A TES trade reversal process may be carried out technically by Market Supervision Cash Trading as long as the legal basis in form of a FWB Management decision is done and legal requirements are covered by the Exchange Rules for the Frankfurter Wertpapierbörse.

2.1.15 Auto Approval functionality

The auto approval functionality allows the participants to approve TES trades automatically according to pre-defined data. The data has to be specified by a user with the "Cash Service Administrator" role. Other users who have the "Cash User Data View" are allowed to see the settings for the auto approval functionality. The following table provides an overview of data that has to be specified for auto approval:

Attribute	Details
User	User for which Auto Approval rule is entered.
Product Assignment Group	Product Assignment Group is a mandatory attribute. It can be the ID of a specific product assignment group or the product assignment group representing the complete market.
FreeText1	Optional.
FreeText2	Optional.
FreeText4	Optional.
InitiatingUserName	Mandatory. LoginName of the initiating user must be of length 11.
ClientIdentifier	Optional. Integer 8 byte. If the trading capacity is set to Agency and the ClientIdentifier obligation for the concerned market is set to "required for agent", then ClientIdentifier is mandatory.
InvestIdentifier	Optional. With following validations: • If InvestmentQualifier has no value, then InvestIdentifier must not be set. • If InvestmentQualifier is 22(algo), then InvestIdentifier must be set. • If InvestmentQualifier is 24(human), then InvestIdentifier is optional
InvestQualifier	Optional. The valid values are: • 22 (denoting an algorithm) • 24 (denoting a natural person)
ExecIdentifier	Optional. Integer 8 byte. With following validations: • If ExecutionQualifier is 22(algo), then ExecIdentifier must be be set. • If ExecutionQualifier is 24(human), then ExecIdentifier is optional.
ExecQualifier	Mandatory. The valid values are: • 22 (denoting an algorithm)

Attribute	Details
	• 24 (denoting a natural person)
LiqProvActivity	Optional. The valid values are: • Liquidity-provision-activity • No-Liquidity-provision-activity
MaximumTradeValue	Optional. If provided, then it is validated that the price multiplied with the quantity is less than or equal to the value provided in this field. If the validation fails, then auto approval is not applied.
SkipQtyValueCheck	Optional. When this flag is set to True, the validations related to Maximum Order Quantity and Maximum Order Value are not executed. This flag is applicable only for TES type LIS.
TradingCapacity	Mandatory. Valid Values are: • Agency • Proprietary • Market Making • Riskless Principle

Table 2: TES Auto Approval Rule Table

Since the data is provided in the system and the auto approval functionality is allowed according to the TES profile, the side of the approving user will be checked as to whether the conditions are fulfilled and approved automatically in case of successful result.

In case of a crossed TES trade (opposite buy and sell sides belong to the same business unit) and pre-defined values for trading capacity is not "Agency", the auto approval for the first side will be accepted but the following auto approval for the other side will be rejected.

When all sides of the entered TES trade are auto approved, then the TES Trade will be ratified upon entry and all sides will be immediately executed. The side status of an auto approved side will be *Auto Approved* in order to distinguish from a side approved directly by the approving trader which has the status *Approved*.

2.1.16 TES Profile

To support a configurable mapping between products and their TES types on the one hand and specific attributes on the other hand, a TES profile will be introduced.

The TES profile will summarize all valid product and TES type combinations termed as TES profile Key and corresponding TES profile attributes. The TES profile attributes will be:

• **Broker Allowed** – This flag will define whether broker trades are supported or not.

• **Max Participants** - This field will provide information about how many participants/TES approving users can be involved on both sides of a TES trade.

• **Price Validation Rule** – The rule will be used for price validation of TES trades.

The TES profile will be published on the Xetra website www.xetra.com under the link:

> Instruments > All Tradable Instruments. The following figure provides an example of the TES profile:

TES Profile				
Key		**Attributes**		
Product Symbol	TES Type	Broker Allowed	Max Participants	Price Validation Rule
ALV	LIS	TRUE	2	LIS PRICE VALIDATION
ALV	OTC	TRUE	2	NO PRICE VALIDATION
BMW	LIS	TRUE	2	LIS PRICE VALIDATION
BMW	OTC	TRUE	2	NO PRICE VALIDATION
COMST.VERM.STR.-O.U.ETF I	LIS	TRUE	2	LIS PRICE VALIDATION
COMST.VERM.STR.-O.U.ETF I	OTC	TRUE	2	NO PRICE VALIDATION

Figure 2: Example of a TES profile for Cash market

(The above TES Profile view is just an example and does not depict the actual configuration)

2.2 Impact on Interfaces

The following chapters outline the changes to the ETI interface, FIX interface, GUIs, and reports. The changes are described in a general fashion to provide an indication of upcoming changes. For detailed changes, please refer to the interface manuals once they are published, and to the *Online Help* in the GUIs.

2.2.1 ETI

To support the TES functionality for the cash market, the following **TES requests and broadcasts** - which are already in place for derivatives markets - will be enhanced accordingly in the context of cash:

- **Enter TES Trade Request:**
  The request will allow the entry of a TES trade containing the general TES trade information like the *instrument Id*, *the trade price*, the *traded quantity*, the *settlement date*, the *time of commencement* or the text field *TES trade description*. It will also specify the users involved on the buy and sell side of the TES trade (approving users). The general TES trade information is visible to all approving users. After the request has successfully been accepted, the executing user will become the initiating user of the TES trade. Note that the *time of commencement* needs to be entered in UTC.

- **Modify TES Trade Request:**
  The request will allow the modification of a pending TES trade by its initiating user. As long as the TES trade is not approved by all of its approving users, the modification will be supported with except of the *instrument Id*.

- **Delete TES Trade Request:**
  The request will allow the deletion of a pending TES trade by its initiating user.

- **Approve TES Trade Request:**
  The request will allow the approval of a pending TES trade side by its approving user. All TES trade side specific information (e.g. *trading capacity*, *text fields*) needs to be specified in this request. A TES trade still needs to be approved by the initiating user if the initiating user is identical to an approving user, i.e. if the user who was initiating the TES trade is also involved on any side of the same TES trade.

The following messages will be used in context of the TES functionality:

- **TES Response:**
  This message will confirm the Enter TES Trade, Modify TES Trade, Delete TES Trade and Approve TES Trade requests.

- **TES Status Broadcast:**
  This message will provide information about the TES service status.

- **TES Broadcast:**
  This message will provide information about entered or modified TES Trades.

- **Delete TES Trade Broadcast:**
  This message will inform initiators and approvers about TES Trade deletions.

- **The TES Execution Broadcast:**
  This message will indicate that all parties have approved the TES trade.

- **TES Trade Broadcast:**
  The TES Trade Broadcast will provide the TES Trade notifications.

The overall TES functionality will only be available via low-frequency sessions as is currently also the case for derivatives markets.

The following chapters describe the message flows for TES Entry, TES Side Approval, TES Modification, and TES Deletion.

2.2.1.1 TES Entry Request Message Flow

It will be possible to enter a TES trade either as a broker or as a buying or selling trader. A user can have both the TES broker as well as the TES trader roles assigned. In case the initiating user has not been assigned the TES broker role and is not involved on any side of the TES trade as approving user, the *TES Trade Entry* request will be rejected. The same applies, if the initiating user has not been assigned the TES trader role and is involved on any side of the TES trade as an approving user.

The *TES Trade Entry* request will be used to enter TES trades. Each side of the new TES trade will be *Pending* by default and will have to be individually approved by the corresponding approving users.

The quantity validation of a TES trade will consider that the buy side quantity is equal to the quantity on sell side of the TES trade.

The entered TES trade will receive a unique TES ID and each approving side will receive an individual *TES Side ID* (TES IDs and *TES Side IDs* are unique per product on the same trading day):

The *TES ID* will be used to identify the unique TES trade and can be used by the initiating user to delete or modify the TES trade as long as at least one side has not been approved.

The *TES Side ID* will be used by the approving users to approve their pending side.

A TES broadcast will be sent out to the initiating user and to the relevant approving user each time the status of the TES trade side changes.

2.2.1.2 TES Side Approval Message Flow

Each trader of an entered TES trade will have to approve its own side by using the corresponding *TES Side ID* received via the corresponding *TES broadcast*.

During the side approval, the approving user will have to complete the side specific information, in particular the trading capacity and additional clearing information.

When both sides of a TES trade belonging to the same business unit are crossed and the trading capacity of at least one side is not identical to *Agency*, the *TES Trade Approve* request will be rejected.

After the side approval, the *approval time* and the side status will be recorded and broadcast to the initiating user of the TES trade. The approving user will receive a response to its *TES Trade Approve* request and a *TES approval broadcast*.

As long as the TES trade is not ratified (i.e. completely approved by all approving users), a second *TES Trade Approve* request updating side specific information will be accepted. Please note that the side approval time will not be updated by a second *TES Trade Approve* request.

When the last TES trade side is approved, the TES trade will be immediately ratified. All approving users will receive a TES execution broadcast and a trade confirmation broadcast.

Once fully approved (all sides executed), the ratified TES trade will be sent to the clearing system. From this point on, it will not be possible for the approving users to modify any TES trade specific information.

2.2.1.3   TES Modification Message Flow

The initiating user of a TES trade will be able to update the TES trade with some new values and new side by using the *TES Trade Modify* request.

The TES modification will be only possible if at least one side is still pending and not approved. The modification will keep the original *TES ID* but will reset the original *TES entry time*. This new *TES entry time* will be systematically returned to the initiating user by in the response of the *TES Trade Modify* request.

In case of a modification where an approving user is a different one, then no *TES Side ID* for the new approving user can be provided. In that case, the corresponding side without the *TES Side ID* will be considered as a new entry and the system assign a new *TES Side Id* by after submission of the request. As a consequence, the prior *TES Side ID* related to the former approving user will be deleted. Both users, i.e. the new approving user and the replaced one, will be informed by the *TES broadcast* of the new side entry respectively about the deletion of the side.

For all new sides, the approving time, the clearing information and the approving status will be reset to *Pending* irrespectively of the previous approval status. All traders will be then informed by a *TES broadcast* that they will have to approve their side again and to fill (or refill) their clearing information.

In case the volume is modified, it will have to be checked as for a regular TES entry, whether the new volume for the buy and the sell side are the same and if it meets the relevant parameters/entitlements.

In case of non-substantial modifications, such as in case of a modification of the TES trade description, there is no need for a new approval but the changes will be communicated to all users via the T*ES broadcast* with the original *TES entry time,* corresponding *side approving time* and the previous status.

2.2.1.4   TES Deletion Message Flow

A pending TES trade may only be deleted by the initiating user via a *TES Trade Delete* request. Based on the corresponding *TES ID*, the TES deletion will only be possible for TES trades which have not been ratified, i.e. there is still one pending side of a TES trade.

After submission of the *TES Trade Delete* request, the initiating user will get a *TES response* and *a TES deletion broadcast.* All approving users, independent of their previous side status (pending or approved) will be informed via the TES *deletion broadcast*.

Once fully approved by all approving users, the executed TES trades cannot be deleted by the initiating user.

2.2.2   FIX

The TES message flows as described in chapter for T7 ETI interface will be also valid for the T7 FIX interface.

To use the TES functionality, the following requests will be provided:

- **Enter TES Trade Request:**
  This request is a Trade Capture Report (message type UAE/AE) with *TradeReportType* (*856*) = 0 (Submit)

- **Modify TES Trade Request:**
  This request is a Trade Capture Report (message type UAE/AE) with *TradeReportType* (*856*) = 5 (Replaced)

- **Delete TES Trade Request:**
  This request is a Trade Capture Report (message type UAE/AE) with *TradeReportType* (*856*) = 6 (Cancel)

- **Approve TES Trade Request:**
  This request is a Trade Capture Report (message type UAE/AE) with *TradeReportType* (*856*) = 2 (Accept)

The following messages to the clients will be used in context of the TES functionality:

- **TES Response:**
  This message is a Trade Capture Report Ack (message type UAR/AR).

- **TES Broadcast:**
  This message is a Trade Capture Report (message type UAE/AE).

- **Delete TES Trade Broadcast:**
  This message is a Trade Capture Report (message type UAE/AE).

- **The TES Execution Broadcast:**
  This message is a Trade Capture Report (message type UAE/AE).

- **TES Trade Broadcast:**
  This message is a Trade Capture Report (message type UAE/AE).

2.2.3 Market Data and Reference Data

The following applies for market data and reference data:

- TES trades for XETR will not be published via MDI and EMDI.
- TES trades with TES Type *LIS* (Large in Scale) will be published via T7's market data interface EMDS. The distribution will be deferred according to MiFID/MiFIR requirements. The LIS value will be published via RDI/RDF.
- TES Activity Status will be published as *TESTradSesStatus* in product state change via MDI and EMDI.
- TES Security Status will be published as part of instrument state changes via MDI and EMDI.
- The TES profile will be published via the "All tradable instruments" file on the Xetra webpage

2.2.4 GUI

2.2.4.1 TES Trade Specific Timestamps

Introduction of TES times: *time of commencement, TES entry time, side approval time, TES execution time (in CET /CEST)*:

The **time of commencement** will be the time of trade agreement (outside the system) between the counterparties and must be entered manually by the initiating user.

The **TES entry time** will be the time of the technical entry of the TES trade into the T7 system, and will be automatically assigned by the exchange.

The **side approval time** will be automatically assigned by the exchange at the time of the respective side's approval.

The **TES execution time** will be given to all executed sides once the trade is fully approved.

The *time of commencement* will be the only time which can be entered manually. Since it is foreseeable that some users from other time zones than the system time could enter the *time of commencement* in their own time

zone by mistake, the *TES Trade Entry* will validate for the plausibility of the *time of commencement* by displaying the difference between entered and the *current time of commencement*.

2.2.4.2 Full UserID Required for Counterparty field

The full *UserID* will be specified for the counterparty side. Instead of a *UserID*, a nickname may be chosen instead, assuming the nickname has already been registered using the *TES Counterparty* view.

For convenience, the context popup of the *Ctpy* field will provide a list of traders which are already registered by the *TES Counterparty* view. It will also possible to type the member Id or the first letters of a nickname while the popup is open to quickly find the respective counterparties from that list. The popup will provide the following information: *UserID*, *Nickname* and *Comment*.

2.2.4.3 Trader Group and User Level

The trader group and user level concept of the T7 trading system will also apply to TES trades. The user level and trader group currently assigned to a trader which originally impacted the on-exchange trading activities will therefore also affect the TES trading activity of this user.

2.2.4.4 Simple Entry Mode for Bilateral TES trades

The *Trade Entry Services* view will provide the entry of all bilateral TES trades.

In order to meet the demand for a simpler entry mode, a *Simple/Broker Mode* toggle button will be provided which allows switching between a simple and a well-developed entry mode.

2.2.4.5 New Trade Ids (TES ID, TES Side ID, Trade Id, Trade Item ID)

New TES trade ids: *TES ID and TES Side ID, Trade ID* and *Trade Item ID*.

The *TES ID* will no longer be unique per market place. Traders will need to identify a TES trade by the *TES ID* together with the product Id.

While the *TES ID* and *TES Side ID* will be valid for an unratified TES trade, the *Trade IDs* and *Trade Item IDs* will be assigned during the ratification of a TES trade.

2.2.4.6 Automatic Alert Signals for Incoming TES Trades

A trader which is logged in to the T7 Trader GUI will need to be notified about incoming TES trades that require the approval of the trader. In order to provide a full service to notify a user which is using the T7 Trader GUI automatic alert signals will be generated.

2.2.4.7 Trades View

The currently separated views *Trades* for the display of on-exchange trades and *TES Trades* for the display of TES trades will be integrated into a single *Trades* view.

2.2.4.8 TES View

Deleted TES trades will still be displayed in the *TES View* but with the status *Deleted*, in this way traders can see that a TES trade was actually deleted.

2.2.4.9 TES Types

For the cash market, only TES Type *OTC* and *LIS* are supported.

2.2.4.10 Counterparty Configuration

The Xetra TES Counterparty Configuration will help the user to lookup the trader ID of their counterparties via the nickname.

2.2.4.11 User Maintenance

The Xetra User Maintenance will be enhanced by the TES Attributes and TES Roles for the cash market.

2.2.5 Reports

The following reports will be enhanced with T7 Release 7.0:

- TC545 - T7 Daily TES Maintenance
  This new report will correspond to the existing Xetra report TC820 but covering all TES trading activities on T7. The initiating user of a TES trade will see all sides' activities but without the corresponding Clearing information which is only disclosed to the approving traders. The information will be split per user, product and instrument and sorted per time.
- TC810 - T7 Daily Trade Confirmation
  The report will document TES trades of the day.

3. Enhancements of Quote Functionality

3.1 Single Sided Quote Configuration

Xetra can define whether single-sided quotes are allowed for a trading model. In this context, a new configuration possibility will be introduced regarding the scope for rejections, i.e. whether both quote sides or only one quote side should be taken into account.

There will be three possibilities for the definition of the scope of rejections at a product level:

1. *NotSSQAllowed* (Single Sided Quote Not Allowed)
   An entry of single sided quote is not allowed. If the validation would only affect one quote side, both quote sides will be rejected regardless.
2. *SSQOnEntryAllowed* (Single Sided Quote Entry Allowed)
   An entry of single sided quote is allowed. However, if a double-sided quote is intended, the rejection always involves both quote sides, i.e. the rejection will never lead to the result that only one quote side is left for entry.
3. *SSQSupported* (Single Sided Quote Supported)
   An entry of single sided quote is allowed and the rejection may lead to the situation that only one quote side is entered to the book.

The quote rejection scope in all cash markets will operate in the mode "Single Sided Quote on Entry Allowed" as outlined in Point (2) above implying that there will be no change in the quote rejection scope from Release 6.1 to T7 Release 7.0.

3.2 Enhancement of Quote Mass Cancellation

The current Quote Mass Cancellation request allows the deletion of multiple quotes of the same trading session within the same product in a single request. A Business Unit (BU) using multiple sessions for trading a single product currently has to send multiple Quote Mass Cancellation requests to delete all its resting quotes. This leads to a higher risk of adverse trades for participants active in providing quotes to the market.

With T7 Release 7.0, the Quote Mass Cancellation request will be enhanced to allow cancellation of quotes on the BU level, where all sessions will be considered. Thus, the risk for a market maker will be mitigated by having the choice of cancelling the quotes either on a session or on a BU level.

Correspondingly, the usage of the existing field *TargetPartyIDSessionID (20655)* in the Quote Mass Cancellation request will be enhanced to be optional . If no specific session is specified on submission, then all quotes belonging to the same BU for the same product will be deleted. The session that originally submitted the request and all sessions that had any quote deleted, will be informed on the cancellation of their quotes. Please note that any session will be able to delete quotes of another session without user validation.

3.3 Impact on Interfaces

The following chapters outline the changes to the ETI interface, FIX interface, GUIs, and reports. The changes are described in a general fashion to provide an indication of upcoming changes. For detailed changes, please refer to the interface manuals once they are published, and to the *Online Help* in the GUIs.

3.3.1 ETI

The following applies to the T7 ETI interface:

Changes will be made to the Quote Mass Cancellation request due to scope extension to BU level. The *TargetPartyIDSessionID* will become optional. The requesting session can be any session belonging to the same Business Unit as has been the concept until now; any session can delete quotes of another session without user validation.

The Quote Mass Cancellation response/notification will be adjusted accordingly.

3.3.2 Market Data and Reference Data

Due to the configuration possibility of the rejection scope, the product snapshot messages will include values of *QuoteSideIndicator* and *QuoteSideModelType* (RDI/RDF).

The initial setting for the cash markets will be *SSQOnEntryAllowed* with valid values of *QuoteSideIndicator* = "*1*" and *QuoteSideModelType* = "*0*" (see chapter 3.1).

3.3.3 GUI

Changes will be made to the Quote deletion window. The *SessionID* will become optional.

4. Data Format Change of Quantity Fields

With the release introduction, the data format of quantity fields will be made more flexible to support quantities with four decimal places. The enhancement will support bonds trading.

The affected fields are those fields containing

- order quantities
- sums of order quantities, e.g. in the context of market data
- traded quantities
- sums of traded quantities (traded volume).

Please note that the T7 ETI interface will provide backwards compatibility while the T7 FIX interface and market and reference data interfaces will not (see chapter 1.1).

4.1 ETI

The data type **Qty** will be changed from a 4-byte integer to an 8-byte field with four decimals (*float with precision four*).

Immediately following the release introduction, quantity values will have to be entered with four additional zeroes at the end. Depending on the product, the following settings will apply:

- **For equities and warrants:** Only integer values with four decimals will be accepted. This means that a quantity of 1 needs to be expressed as "10000" in the corresponding ETI field. Quantities below 1 will be rejected.
- **For bonds:** Integer values with four decimals and decimals can be entered if Minimum Tradable Unit is below 1

A selection of affected fields is stated below:

- OrderQty
- CumQty
- DisplayQty
- FillQty
- LastQty
- LeavesQty[4]

Please note that all newly introduced quantity related fields will be affected too.

4.2 FIX

Quantity fields used in the FIX interface are defined with a format that allows up to 15 digits before decimal point and at most 4 significant decimal places. The usage and the allowed formats for the quantity fields are different depending on the market and on the instrument setup.

In general, quantity fields can be entered with four decimal places but not necessarily. For example, a quantity of 1 can be either entered as "1" or "1.0000". For the cash market, quantities with decimals other than "0" are also possible if the related instrument has a minimum tradable unit below 1 (i.e. for bonds). For equities and warrants, only integer values will be accepted and decimals other than "0" will be rejected.

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[4] Please note that the list of quantities do not represent all affected quantity related fields and therefore, is incomplete.

4.3 Market Data and Reference Data

The format change will affect MDI, EMDI, EOBI. The following examples represent some affected fields:

- LastQty (EOBI)
- RestingCxlQty (EOBI, EMDI)
- OrderQty (EOBI)
- MDEntrySize (EOBI, EMDI)[4]

The RDI/RDF interface and quantity related fields in the reference data published on the Xetra webpage will not be affected.

4.4 GUI

For equities and warrants, quantity decimals will be entered and displayed in the same integer format as before.

For bonds, decimals will be displayed if the minimum tradable unit is less than one.

4.5 Reports

The format change will be applied to the reports. Quantity related fields will be displayed with four decimal places. Please refer to the "XML Reports - Reference Manual" for further details.

5.   Removal of Connection Gateways

The primary and secondary Connection Gateways (CWG) for Low Frequency (LF) and High Frequency (HF) sessions are currently assigned to the individual sessions during the ordering process via the member portal. The CWG plays a central role in the logon process to the T7 trading system via the ETI interface. The primary and secondary trading gateways, which are also assigned to the ETI session during the ordering process, or to the active Partition-Specific (PS) gateway are provided in the response to the gateway request message.

To simplify the ETI session logon process, the connection to the T7 trading system via the CGW will no longer be possible with T7 Release 7.0. Participants can either directly logon to the active PS gateway for HF sessions or to any of the LF trading gateways for LF sessions. The IP addresses of the active/standby PS gateways and the LF trading gateways are provided in the N7 Network Access Guide available via the Xetra website.

Participants using ETI 6.1 backward compatibility for T7 Release 7.0 will still be able to perform the session logon via the CGW. In the next T7 release, the CGW will no longer be available.

Prior to the ultimate removal of the CGW with the next T7 release, the assignment of the CGW to the HF/LF sessions will still be visible in the member portal and will also continue to be provided during the ordering of new sessions. For participants using the ETI 7.0 layouts, this information can be ignored.

6.   Other Functional Enhancements

6.1   Enhancements to MIFID II Requirements

The following enhancements will be introduced due to MiFID II requirements:

- Interface Changes
  New fields will be added to the trade notifications and to the TES trade notification:
  - The individual transaction identification code (*TVTIC*) for each transaction resulting from full or partial executions
  - The field *PartyIDClientID*
  - The field *OrderAttributeLiquidityProvision*
  - The *fields PartyIDInvestmentDecisionMaker*, *PartyIDInvestmentDecisionMakerQualifier*, *ExecutingTrader*, *ExecutingTraderQualifie*r
- Market Data Interface Changes
  All components, which are related to the calculation of the *TVTIC* (with except of the *Envir_Flag*[5]), will be distributed separately in the market data interfaces. For details about the individual components, please see the "Reporting Handbook".
- XML Report Changes
  - The report "TC810 – T7 Daily Trade Confirmation" will include the aforementioned fields. Please note, that the *TVTIC* is already included.
  - Changes to reports "TR901 MiFID II Message Rate Report" and the "TR101 MiFID II OTR Report".
    Only relevant for participants with a "multimember clearing account", i.e. participants using more than one member ID.
    The "TR901 MiFID II Message Rate Report" and the "TR101 MiFID II OTR Report" reports are currently provided separately for each member ID. With the release introduction, both reports will be provided at investment firm level, i.e. all used member IDs and hence the trading activity is aggregated in one report. MiFID II rules require such change.

6.2   Introduction of Intraday Auction Only Trading Restriction

Participants can flag an order as Intraday Auction Only (IAO) order by setting *TradingSessionSubID* to Intraday Only Auction in ETI/FIX or choosing the *Restriction* IAO in the Order Entry related GUI views. In case an order is flagged this way, it will only participate in scheduled intraday auctions, i.e. no opening, no closing, and no volatility auction. As with all auction only orders, an order flagged as IAO will receive a new priority time stamp each time an intraday auction begins, e.g. the order is activated for the intraday auction.

6.3   Changes to Auction Price without Turnover Calculation

With T7 release 7.0, the conditions for a calculation of the Auction Price without Turnover (APWT) at the end of the closing auction will change.

Currently, an APWT is only calculated at the end of the closing auction when a two-sided quote of a Designated Sponsor is placed in the order book. With the release introduction, the calculation will be enhanced as follows:

- An APTW will be calculated for all scheduled auctions if the instrument has this configuration
- An APWT will be calculated if the same Designated Sponsor has a quote/order on both side of the order book.

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[5] The *Envir_Flag* is a prefix from session context with valid values of „1" (T7 environment) and "2" (T7/FX environment).

6.4 Enhancement of Mass Quote Request

With production launch, the quote type (*537*) in the Mass Quote request will be required. Quotes of Designated Sponsors will have to be marked as "1" (*Tradable*).

6.5 Change of Valid Characters for Free-Format Text Fields

With the release introduction, the valid values for the free-format text fields (FreeText1, FreeText2, FreeText4) will be changed. The following characters will no longer be supported: " (0x22) , & (0x26), = (0x3D), ` (0x60) , @ (0x40), + (0x2B), ' (0x27), < (0x3C), > (0x3E).

6.6 Change of Attribute Name (VDOMinExectableVolume)

Currently, the attribute *VDOMinExecutableVolume* is used for Volume Discovery Orders only. Due to increased scope of the field, e.g. usage of the large in scale value for the TES functionality, the name will be changed to *LargeInScaleValue* with the release introduction.

6.7 New Information of Liquidity Bands in Instrument Reference Data

Currently, the instrument reference data published via the "All tradable instruments" file on the Xetra webpage include the price steps and tick size. With production launch, this information will be supplemented by the assigned liquidity band.

6.8 Bonds and Warrants Trading

T7 Release 7.0 will take preparatory steps to introduce bond and warrant trading.

With production launch, all interfaces (ETI, FIX, Public Reference data, GUI, report TC810) will include bond and warrant specific information. These changes will become relevant with the launch of warrant and bonds at a later point of time.