

Agenda

Overview & Introduction

MiFID II / MiFIR Enhancements

Xetra Retail Execution Service

Enhancements of Pre-Trade Control Checks

Latency Enhancements

Further Changes & Enhancements

1 Overview & Introduction



T7 Release 12.0 in a nutshell

New Features & Enhancements		T7 Börse Frankfurt	
	XETR	XFRA	
MiFID II / MiFIR Enhancements	Х	X	
Xetra Retail Execution Service	Х		
Enhancements of Pre-Trade Control Checks	Х	X	
Latency Enhancements	Х	X	
Further Changes and Enhancements	Х	X	

Backwards compatibility for trading interfaces



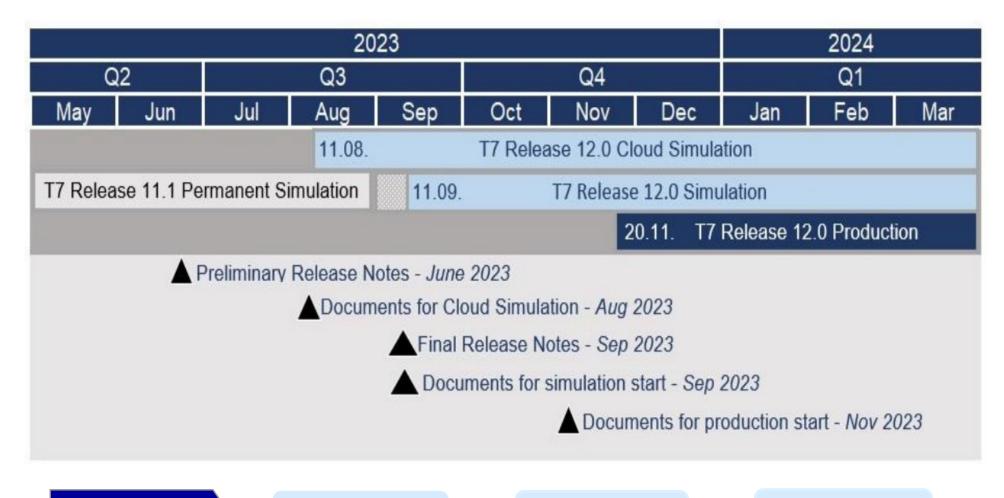
NO

Backwards compatibility for market & reference data interfaces



NO

Introduction Schedule



Release Milestones **T7 Cloud Simu** 11 Aug 2023



Simulation 11 Sep 2023



Production 20 Nov 2023

Publication Schedule

	Derivatives Markets			Q2	Q:	3/ 20	023	Q4/	2023
T7 Release 12.0		Cash Markets	Combined	Jun	Jul	Aug	Sep	Oct	Nov
Preliminary Release Notes	х	X		•					
Enhanced Trading Interfaces Manual, incl. XSD, XML Representation and Layouts			х			•			•
FIX LF Manual, incl. XSD, XML Representation and Layouts			Χ			•			•
Market-, Enhanced Order Book- and Reference Data Interfaces Manual incl. XML Fast Templates & FIXML Schema Files			х			•			•
Trader, Admin and Clearer GUI – User Manual	Х	X				•			•
Final Release Notes	X	X					•		
Extended Market Data Services Manual & Underlying Ticker Data Manual incl. XML Fast Templates			х				•		-
XML Report Reference Manual, Modification Notes & XML Schema files			Х				•		-
Functional Reference			X				•		
Functional and Interface Overview			X				•		
Trader, Admin and Clearer GUI – Installation Manual			X				•		
Participant and User Maintenance Manual	Х	X					•		
Cross System Traceability			X				•		
Incident Handling Guide			X				•		
Participant Simulation Guide			X				•		
T7 Known Limitations for Simulation			X				•		
Cash Market Instrument Reference Data Guide		X							•
Exchange Rules & Regulations		X							•
Market Models		X							•
T7 Known Limitations for Production			Х						•

- Version 1 (identified by ◆) will be published in Aug 2023
- Version 2 (optional)
 (identified by ■) will be published in
 Sept 2023
- Version 3 (optional)
 (identified by ●) will be published in
 Nov 2023
- All documents will be available on www.xetra.com under:

Technology > T7 trading architecture > System documentation > Release 12.0

2 MiFID II / MiFIR Enhancements



MiFID fields validation logic change in Order / Quote / TES / Enlight (1/2)

T7 enhancements

Check list

Introducing mandatory field flagging for MiFID II fields in all T7 interfaces & trader GUI

- Client ID in Riskless Principal trading* will be mandatory (Cash Market only), must be empty for proprietary trading capacities
- For proprietary trading in general and for agent trading if applicable, for the identification of natural persons, a short code will be mandatory in the Execution Decision ID (qualifier set to human, i.e., natural person) and Investment Decision ID (qualifier set to human, i.e., natural person)
- Trader GUI introduces fields Execution Decision ID and qualifier
- TES Approval Process Extension will follow the same field logic. Trading participants need to check whether their existing auto approval rules adhere to the new field logic

Exclusion of the numerical "0" in the three MiFID II short code / AlgoID fields

The submission of a zero in the Execution Decision ID, Investment Decision ID, and Client ID will lead to a rejection of the entry, modification, or deletion request as "0" is not a permitted short code / Algo ID value

- Short codes and Algo IDs must have a value equal to or greater than 1
- For proprietary trading it is not allowed to use the ClientID as free text field
- Short codes of the natural person primarily responsible for the Execution Decision and Investment Decision (if applicable) must be available for submission in the MiFID fields and registered with the trading venues. Esp. trader short code registrations to be checked
- TES auto approval rules to be checked

^{*}Riskless Principal = ESMA trading capacity MTCH
Agency, Retail Agency = ESMA trading capacity AOTC

Proprietary, Market Making, Issuer- and Retail Liquidity Provider = ESMA trading capacity DEAL

MiFID Fields validation logic change in Order / Quote / TES / Enlight (2/2)

	Execution Decision ID		Investment	Client ID	
Trading Capacity	Qualifier Algo / Human	Execution ID	Qualifier Algo / Human	Investment Decision ID	Client ID
AGENCY	mandatory	mandatory	optional	optional	mandatory
RISKLESS_PRINCIPAL	mandatory	mandatory	optional	optional	mandatory
RETAIL_AGENCY	mandatory	mandatory	optional	optional	mandatory
PROPRIETARY	mandatory	mandatory	mandatory	mandatory	empty
MARKET_MAKING	mandatory	mandatory	mandatory	mandatory	empty
ISSUER_LIQUIDITY_PROV	mandatory	mandatory	mandatory	mandatory	empty
RETAIL_LIQUIDITY_PROV	mandatory	mandatory	mandatory	mandatory	empty

^{*}Investment decision ID and qualifier are optional in Agency, Retail-Agency and Riskless Principal trading capacity, if qualifier set then the field investment decision ID is mandatory

Please find more information on MIFID flagging in our "Factsheet: MiFID II / MiFIR Flagging Requirements - Execution decision, investment decision, client ID and DMA " under following path

xetra.com > Newsroom > Current regulatory topics > MiFID II and MiFIR > Reference data reporting

Changes on Interfaces

FIX LF

Default settings will be removed as follows

Information	Default setting removed with T7 12.0
Investment Qualifier	Human
Investment Qualifier	Human
Liquidity Provision Indicator	Non_liquidity_providing
Commodity Hedging	False

T7 Trader GUI

- T7 Trader GUI will automatically fill Execution Decision ID & Execution Qualifier (only if user sets default value in application preferences)
- When logging in, pop-up window will prompt user to set default value for Execution Decision ID
 (Execution Qualifier will be "Human" (default at login)) & can be changed to "Algo" manually at the time of transaction submission

3 Xetra Retail Execution Service



Xetra Retail

- Xetra Retail is a new functionality for the execution of retail orders for the trading venue Xetra.
- The new service aims to offer the best execution of retail orders at attractive conditions:
 - The new execution service offers price improvements based on the current Central Limit Order Book (CLOB) and based on the competing quotes of dedicated Retail Liquidity Providers (RLPs).
 - Furthermore, the transaction fees for the execution of retail orders will be reduced.
- → With the new Xetra execution service retail orders will benefit from improved execution prices and lower transaction fees.



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Segregation of retail flow allows for commission free retail trading at reference prices with price improvements covering the entire trading day

Main objectives

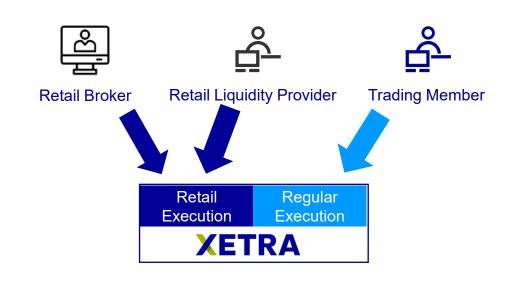
- Keep existing retail order flow
- Win back retail order flow from largest retail order flow provider (especially with focus on best execution policies)
- Participation in further growth of the German retail market

Critical Success Factors

- **Retail OFPs:** Low implementation and maintenance effort and predictable positive P&L impact incl. ease of use (e.g. automated order routing out of the best ex policy)
- Retail Investors (self-directed): Best execution during the main trading trading hours in a comprehensive instrument scope with various order types (ease of use)
- Liquidity Provider: Generation of revenues out of the retail order flow in an environment ensuring limited trading risks (i.e. uninformed flow only)

Basic concept

- Segregation of retail flow in the Xetra order book (aggressive and passive) with preferred execution of the retail orders against retail liquidity providers ensuring reference market matching with a price improvement option (9:00 - 17:30h)
- Reduced trading fees for retail brokers
- Extra-fees for Xetra Retail Liquidity Provider



General Setup

Retail Order

- A retail order originates not from a client who has been classified as a "professional client" within the meaning of MIFID definition
- Is an agency order that originates from a natural person and is submitted to the Exchange by a RMO, provided that
 no change is made to the terms of the order with respect to price or side of market and the order does not originate
 from a trading algorithm or any other computerized methodology

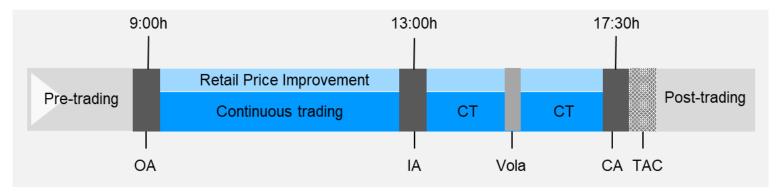
Retail Member Organization

- Trading members with retail order flow might register as a Retail Member Organization (RMO)
- RMOs are allowed to sent retail orders via a new T7 trading capacity (legally A-account)
- Orders sent via the new trading capacity are considered as retail orders
- In general, retail orders are treated as regular orders. In addition, retail orders are executable against quotes / orders of Retail Liquidity Providers (RLP)

Retail Liquidity Provider

- Trading members might register as an RLP. Number of RLPs per instrument is not limited
- With the registration an instrument basket is assigned to the RLP for which he is allowed / obliged to enter RLP
 quotes / orders. RLPs are allowed to sent RLP quotes / orders via a new T7 trading capacity (legally P-account)
- During continuous trading RLP quotes / orders are only executable against retail orders. RLP quotes / orders do not participate in scheduled auctions
- However, they participate in volatility interruptions and are treated as regular orders and therefore executable against all other orders (incl. other RLP quotes / orders) in the order book

Flow of Trading



Instrument scope

- In general, available for all tradable instruments on the trading venue Xetra (MIC: XETR)
- However, only equities will be supported with the start of Xetra Retail

Trading

- After the opening auction, retail orders might get executed against other orders in the order book or against the RLP quotes / orders (price-/retail-/ time priority). RLP quotes / orders can be entered after the opening auction and can match against sitting and incoming marketable retail orders
- RLP quotes do not participate in scheduled auctions. With the start of the intraday auction all RLP quote / orders are deleted. However, they participate in volatility interruptions as regular orders (i.e. RLP quotes / orders might also get executed against non-retail orders or other RLP orders within a volatility interruption)
- With the start of the regular Xetra closing auction all RLP quote / orders are deleted
- RLP quotes / orders entered during a scheduled auction are rejected by the trading system

4 Enhancements of Pre-Trade Control Checks



Overview

Key Features

- Xetra will enhance its validation applied for maximum order value (MOV) and Maximum Order Quantity (MOQ) for orders & quotes in order book trading
- Minimum of user limit & product limit will determine maximum allowed order value for a given order per user & product
- Currently, Xetra offers a maximum order value check on order / quote entry and modification for order book trading
- With T7 Release 12.0, Xetra will enhance this MOV and introduce exchange specified limits for each product that will additionally be considered in MOV check
- The possibility to skip the MOV check based on the respective instruction send via the order layout will continue to be available via a flag (flag will only skip Trading Participant's provided user limit component as it is applied today not exchange limit)

5 Latency Enhancements



Latency Enhancements



Immediate Deletion of Quotes on Quote Inactivation

 Quotes can be deletes immediately together with quote inactivation request



No delay for Quote Activation if Session does not have any Quotes

 Quote Activation requests will not be delayed anymore, if session does not have any quotes



DSCP bit now indicating whether executed Quantity > 1

 DSCP bit from EOBI IP protocol header will now be used to indicate whether executed quantity was greater than 1



New EOBI Information reg. remaining aggressive Quantity

 EOBI Execution Summary will be enhanced by group of 3 fields with information reg. possibly remaining quantity in book

6 Further Changes & Enhancements



Further Changes & Enhancements (1/3)

Decommissioning Volume Discovery Orders



- Possibility to enter VDOs will be decommissioned
 - In all interfaces and GUIs, the order type VDO, its special second limit field, and the special valid value Good-till-Crossing (GTX) for the order validity (respectively TimeInForce code) will be removed.



TES Trading: New field TradePublishIndicator (1390) in ETI messages

- Existing mandatory field
 TradePublishIndicator (tag 1390) will be added to following ETI messages
- Enter TES Trade Request
- Modify TES Trade Request
- Approve TES Trade Broadcast
- TES Trade Broadcast already exists for this message
- Existing field isDisclose will be added in TC545 Daily TES Maintenance as optional field

Null Spread Quote in trading model Continuous Auction with Market Maker



- Null Spread quotes will be introduced to Continuous Auction with Market Maker making it more similar to Continuous Auction with Specialist
- No Null Spread quotes will be allowed for quote type Standard
- Entering a Null Spread Matching quote in Precall will be declined

Further Changes & Enhancements (2/3)



Dedicated Rejection Reason for PTRL Consumption violation

In case of a rejection of a transaction due to an exceeded PTRL consumption, a new dedicated rejection reason will be returned to customers via ETI SessionRejectReason (373) and FIXML BusinessRejectReason(380) fields: 10016 Pretrade Risk Limit exceeded



Definition of Pre-Trade Risk Limits via HF session

Possibility given to inquire and define PTRLS via HF sessions

Decommissioning of Contract NotesReports

- Due to limited usage, Xetra Contract Notes
 Reports will be decommissioned in Q4
 2023, as part of T7 Release 12.0
- Only affected Trading Participants are those still using the service and who therefore are required to take appropriate action
- All adjustments on Trading Participants' side need to be completed by November 2023
- For more information see Xetra circular 050/2022

Further Changes & Enhancements (3/3)



Technical migration of processing reg. bilateral trades (non-CCP eligible trades)

- Post trade processing of bilateral trades, incl. the bilateral aggregation service, will be migrated to a new technical infrastructure (C7)
- No functional changes to existing services, besides decommissioning of Contract Notes report



Encryption of data traffic on leased lines

 Data traffic (not complete traffic) on leased lines will be SSH encrypted (no need for customers to care for SSH keys)



Display changes of numeric & numeric signed fields in dedicated XML reports

- Due to migration to enhanced data platform, adaption to content display of numeric/numeric signed fields with decimals takes place (stepwise approach)
- Following reports to be migrated with/after T7 R 12.0: TR101 TC550 ,PM700, PM710
- TC540 was already migrated to the new platform in 2021

Thank you!

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If you have any further questions, please contact your Key Account Manager or send an e-mail to client.services@deutsche-boerse.com



Xetra Retail - General Setup

Retail Order

- A retail order originates not from a client who has been classified as a "professional client" within the "Wertpapierhandelsgesetz" (§ 63 (7) WphG) definition (private investor).
- Is an agency order that originates from a private investor and is submitted to the Exchange by a RMO, provided that no change is made to the terms of the order with respect to price or side of market and the order does not originate from a trading algorithm or any other computerized methodology (excluding SORs for dynamic best execution policies).

Retail Member Organization

- Trading members with retail order flow might register as a Retail Member Organization (RMO).
- RMOs are allowed to send retail orders via a new T7 trading capacity (legally A-account).
- Orders sent via the new trading capacity are considered as retail orders.
- In general, retail orders are treated as regular orders. In addition, retail orders are executable against quotes / orders of Retail Liquidity Providers (RLP).

Retail Liquidity Provider

- Trading members might register as an RLP. Number of RLPs per instrument is not limited.
- With the registration an instrument basket is assigned to the RLP for which he is allowed / obliged to enter RLP quotes / orders. RLPs are allowed to sent RLP quotes / orders via a new T7 trading capacity (legally P-account)
- During continuous trading RLP quotes / orders are only executable against retail orders. RLP quotes / orders do not participate in scheduled auctions.

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Xetra Retail - Basic Matching Rules

During this trading phase in general the basic continuous trading matching rules apply. However, the following special rules need to be considered:

- Rule 1: Retail orders are matched against all available orders in the order book and all available RLP quotes / orders.
- Rule 2: The RLP quote / order is treated as fully integrated in the order book. However, for the execution of retail orders, a price/ retail / time priority for the RLP quote / order applies. RLP quotes / orders cannot match against each other.
- Rule 3: In case of a crossed order book situation of a non-retail order and a RLP quote / order, where the non-retail order is top of book, the RLP-quote / order is disclosed to the market with the same limit as the crossed order limit on the opposite side.
- Note: During continuous trading a quote / order of a retail liquidity provider is only executable against a retail order and not against other orders or quotes in the order book. This is also true in case of more than one RLP per instrument, i.e. RLP quotes / orders do not match against each other.

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