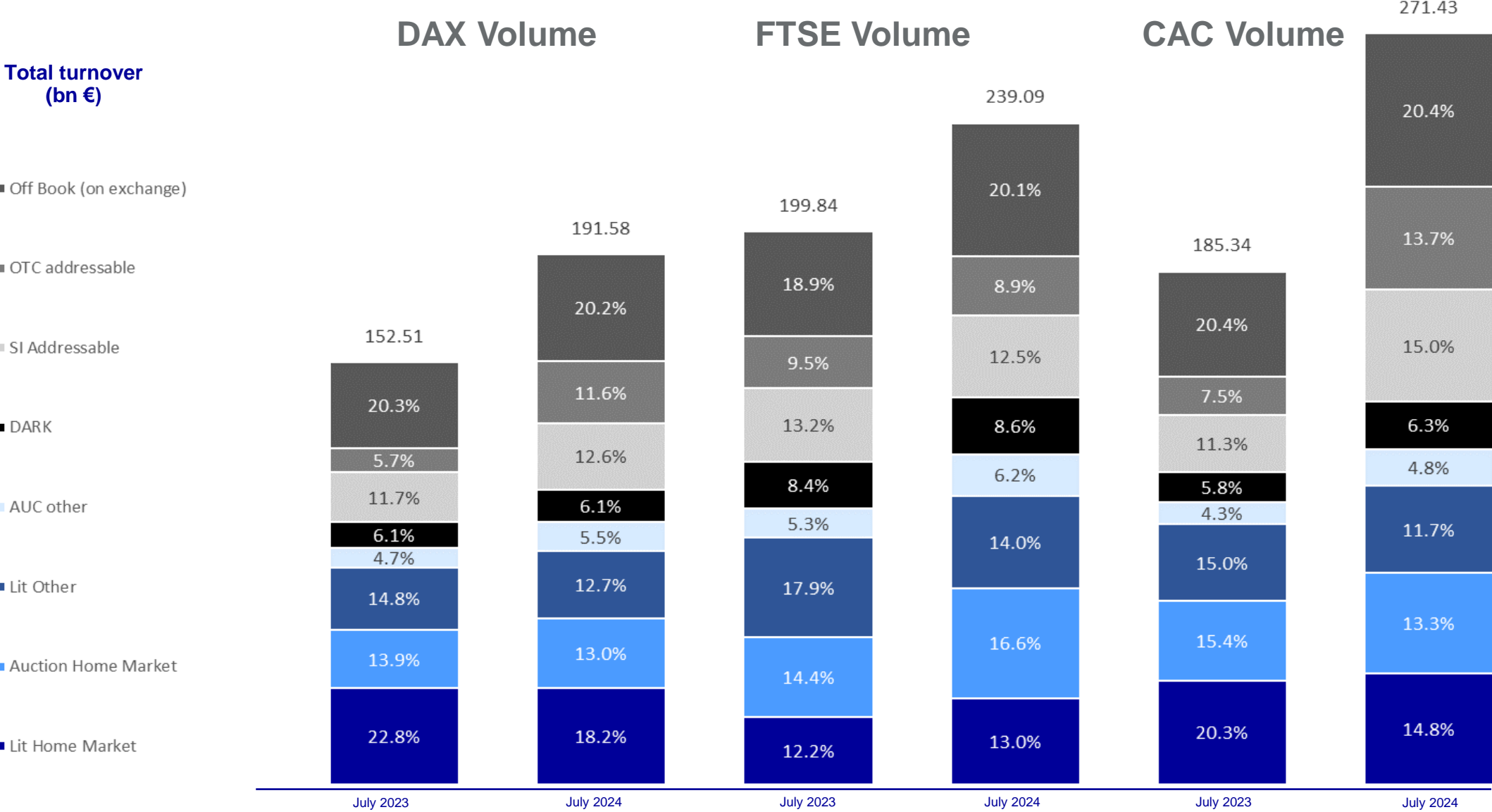# Xetra Midpoint

## Dark Pool integrated in Reference Market

27/09/24

DEUTSCHE BÖRSE GROUP

Market Environment and Strategic Rationale

European Indices and Fragmentation

DAX Volume   **FTSE Volume**   **CAC Volume**

Total turnover (bn €)

Legend:
- ■ Off Book (on exchange)
- ■ OTC addressable
- ▪ SI Addressable
- ■ DARK
- ▫ AUC other
- ■ Lit Other
- ■ Auction Home Market
- ■ Lit Home Market

DAX Volume

July 2023 — Total: 152.51
- 20.3%
- 5.7%
- 11.7%
- 6.1%
- 4.7%
- 14.8%
- 13.9%
- 22.8%

July 2024 — Total: 191.58
- 20.2%
- 11.6%
- 12.6%
- 6.1%
- 5.5%
- 12.7%
- 13.0%
- 18.2%

FTSE Volume

July 2023 — Total: 199.84
- 18.9%
- 9.5%
- 13.2%
- 8.4%
- 5.3%
- 17.9%
- 14.4%
- 12.2%

July 2024 — Total: 239.09
- 20.1%
- 8.9%
- 12.5%
- 8.6%
- 6.2%
- 14.0%
- 16.6%
- 13.0%

CAC Volume

July 2023 — Total: 185.34
- 20.4%
- 7.5%
- 11.3%
- 5.8%
- 4.3%
- 15.0%
- 15.4%
- 20.3%

July 2024 — Total: 271.43
- 20.4%
- 13.7%
- 15.0%
- 6.3%
- 4.8%
- 11.7%
- 13.3%
- 14.8%

27/09/24

* Data provided by big xyt

Likelihood to obtain best execution price for 10kEUR Order in European Indices

DAX

SMI

FTSE

CAC
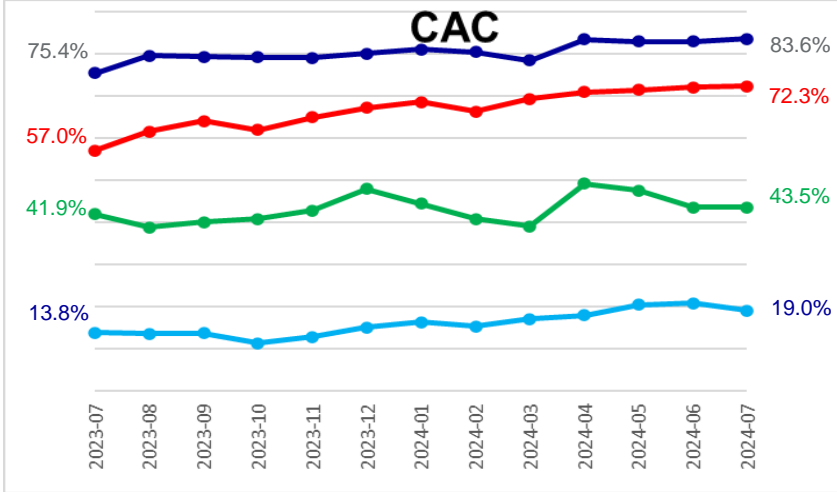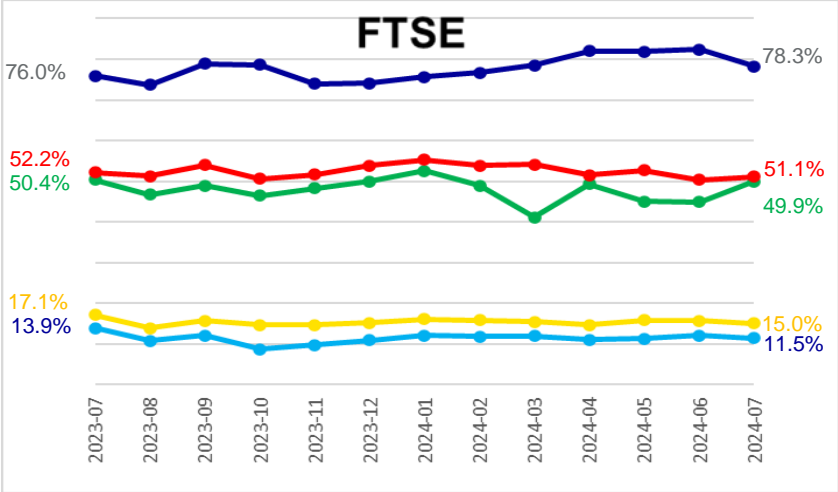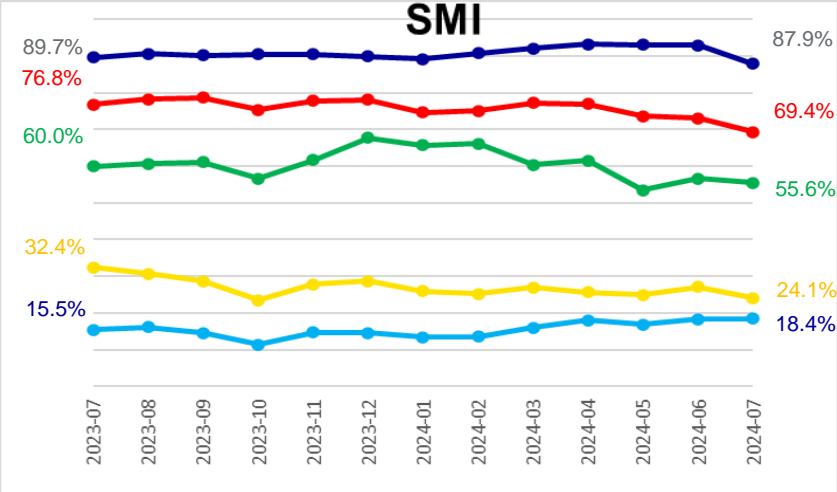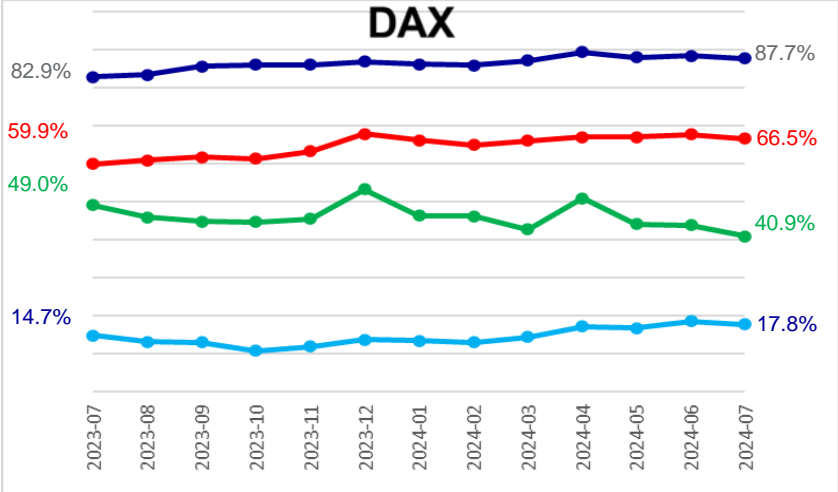
Home Market: DAX=Xetra, CAC=Euronext, FTSE=London, SMI=SIX | Turquoise | Cboe BXE | Cboe CXE/Cboe | Aquis

*Data provided by big xyt – Figures provided are the average of the latest calendar month

27/09/24

4

Functional Overview and Value Proposition

Xetra Midpoint: Dark pool integrated in global reference market for German equities

Maximize Liquidity

Xetra Midpoint enables participants to seamlessly trade selected equities and ETFs in the dark order book, pegging orders to Midpoint and executing Dark-Lit Sweep to Xetra CLOB with zero latency.

Matching Logic

Execution maximization based on volume-time priority. Protect your orders with MAQ (minimum acceptable quantity).

Price Improvement

Profit from significant price improvement by saving half the spread compared to aggressive CLOB orders.

Confidentiality and Speed

With no pre-trade transparency, safeguard your intentions while enjoying zero latency connectivity to the reference market Xetra.

Efficient Reporting

Benefit from Separate Reporting MIC Codes and segment MICs under operating MIC XETR, ensuring streamlined reporting processes under MiFIR Reference Price Waiver*.

Advanced Order Options

Benefit from order limits, Immediate or Cancel (IOC), Fill or Kill (FOK) functionalities, empowering you with flexible trading strategies.

* Subject to regulatory approval by ESMA

Concept

Trading Participant

Regular Order | Sweep Order | Midpoint Order (firm)

Xetra Midpoint

Sweep Order

dark
lit

Xetra CLOB
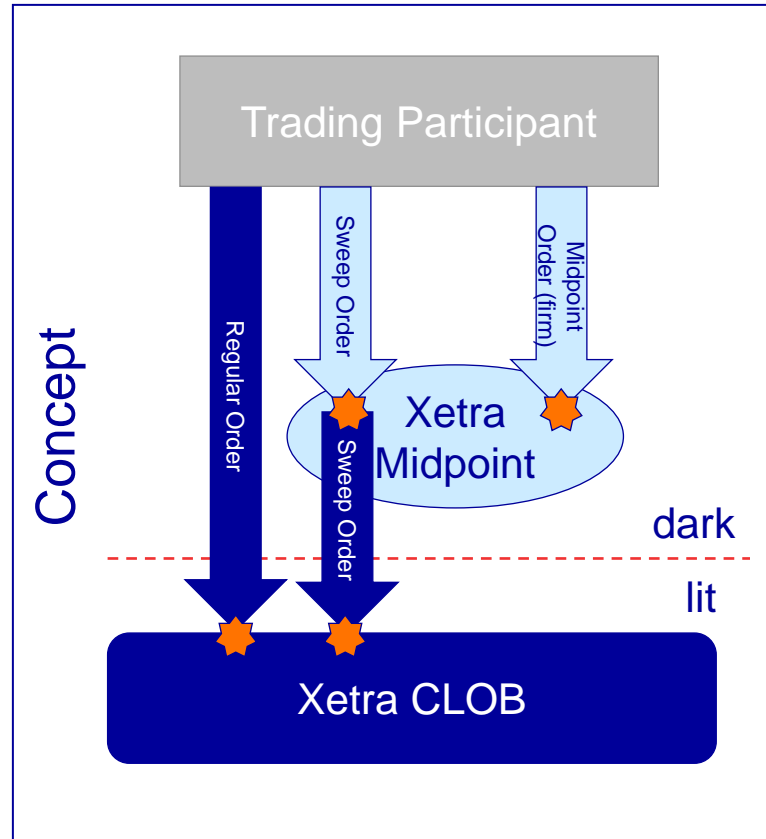
XETRA

Midpoint at a glance

- Integrated midpoint solution in the heart of price discovery

- Simplify trading with a single order accessing two liquidity pools, boosting operational efficiency for clients.

- Unlock enhanced matching opportunities at more favorable prices, maximizing trading outcomes.

- Pricing: Midpoint orders: 0.3bps Sweep orders: Standard pricing (details on slide 4)

Be part of Xetra Midpoint as of **25 November 2024**

Member Simulation available

ETI Short Layout support starting in SIMU on October 1st

27/09/24

Midpoint Orders vs Midpoint Sweep Orders

Midpoint Orders

- Will be inserted into the midpoint order book only

- Any remaining quantity is saved in the midpoint order book

- Safeguard: Self-Cross Prevention

  In case of a cross (SMP ID), sitting midpoint orders will be cancelled

- MAQ definition possible

  Automatic adaption to remaining order quantity when MAQ exceeds remaining order quantity

- IOC / FOK available

- Order limits available (not restricted to ESMA tick size)

Midpoint Sweep Orders

- Will first be tried for execution in the midpoint order book once

- Any remainder is forwarded to the CLOB and treated like a regular order with the possible restrictions provided

- No safeguard in midpoint trading. SMP definitions apply in the CLOB

- All execution conditions and order restrictions available, only apply in CLOB

- MAQ definition not possible

- Modifications apply to the CLOB only

Midpoint Orders and Midpoint Sweep Orders must also be MiFID II compliant and the MiFID II validations will also be performed for these orders.

Midpoint Matching Algorithm

- Matching Trigger Events: Incoming Order, Change of Midpoint Price, Change in Vola Range, Matcher Failover…

- Prioritization: Volume-Time Priority under consideration of MAQ

- Execution principle: maximization of overall execution volume

Bid Time	Qty	MAQ	Midpoint Order Limit	Midpoint Order Limit	MAQ	Qty	Ask Time
10:00	100	100	9,90	M	75	75	10:01
10:05	100	100	M				
10:02	50	-	M				
10:04	25	-	9,90				

- Current midpoint price: 10,00 EUR

- Potential triggers:
  - Incoming Midpoint Sell Order (Market) with quantity 25, executed together with resting 10:01 sell order against 10:05 buy order
  - Change from midpoint price to 9,90 EUR leads to execution of 10:02 and 10:04 buy orders against 10:01 sell order

Dark Trading and Latency costs

DAX40 instruments at London MTFs
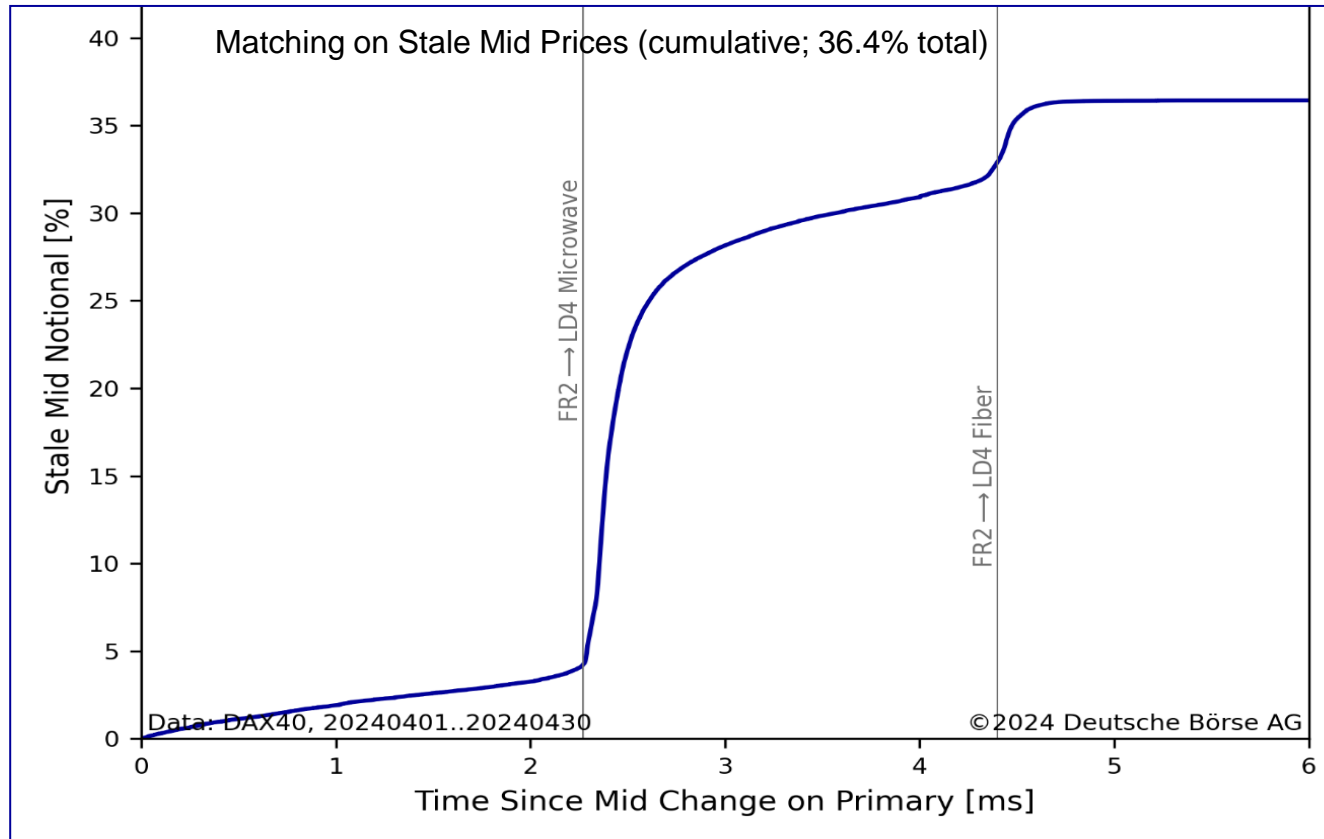
Data source: Refinitv

- Chart shows cumulative notional value of DAX40 trades on dark venue (hosted on London data center) away from Xetra Midpoint vs. latency since Midpoint on Xetra changed

- In total, ca. 30% of notional is latency-arbitrated

- Stale prices are on average 2.6 bps from Xetra Midpoint

Xetra Midpoint will have no latency

Participants will NOT be exposed

to any latency costs!

27/09/24

Technical Implementation Details

Instrument Reference Data

Tag	Field Name	Req'd	Data Type	Description
28913	MidpointTrading	N	Midpoint-Trading (enum)	Indicates whether the instrument is enabled for Midpoint trading.
28914	MidpointExecVenueID	N	string	Market Identifier Code (ISO 10383) used for reporting midpoint trades to the supervisory authority.

For tag 28913, Value table:

Value	Description
0	Disabled
1	Enabled

T7 Release 13.0

Market & Reference Data Interfaces Manual

Deutsche Börse Group

Version 1

- See "Instrument Snapshot Message", T7 Market and Reference Data Interfaces Manual Release 13.0
- Respectively for other reference data sources, i.e. FIX, Static Instrument Files

- Midpoint trading indicator (enabled / disabled) is the result of

  - Instrument type check (equities, ETFs and depository receipts only)
  - Most relevant market check (Xetra only)
  - DVC suspension status check (only instruments that are currently not suspended on Xetra or EU-wide)

- New Midpoint reporting / segment MICs:
  - XEMA = (Xetra Midpoint) Regulated Market
  - XEMB = (Xetra Midpoint) Open Market
  - XEMI = (Xetra Midpoint) Scale

Order Entry and Modification

Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
110	MinQty	N	8	64	Qty	Minimal Quantity that has to be executed in MidPoint matching.
30388	MidPointType	N	1	172	unsigned int	Midpoint order type.

Value	Description
1	Midpoint order
2	Midpoint sweep order

- See "New Order (single)" message, T7 Enhanced Trading Interface Cash Message Reference, Release 13.0

- Respectively for order modifications, order deletion reports, order information messages, also in FIX, GUI

- 2 new fields for order entry and modification, re-use of existing order entry and order maintenance messages

- Modifications of MinQty lead to new time stamp (midpoint orders only)

- Modification of MidPointType not possible

- Xetra Retail trading capacities (RMO and RLP) not available for midpoint orders and midpoint sweep orders

Immediate Execution / New Order Response

Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
378	ExecRestatement-Reason	Y	2	168	unsigned int	Code to further qualify the field Exec-Type (150) of the Execution Report (8) message.

Value	Description
101	Order add accepted
102	Order modify accepted
105	IOC Order accepted
107	FOK Order accepted
181	Ownership Changed
114	Order has been changed to IOC
205	Midpoint Sweep order changed to regular order

Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
574	MatchType	Y	1	173	unsigned int	The point in the matching process at which this trade was matched.

Value	Description
4	Auto-match incoming order
5	Cross Auction
7	Call Auction
11	Auto match resting order
14	Continuous Aution
12	Auto match at midpoint

Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
1443	>FillLiquidityInd	N	1	208	unsigned int	Indicates whether the order added or removed liquidity. Required only for execution reports generated for fills.

Value	Description
2	Removed Liquidity
101	Removed Liquidity Midpoint
5	Triggered Stop Order

Message Body (1x)

FillGrp (n)

- See "Immediate Execution Response", T7 Enhanced Trading Interface Cash Message Reference, Release 13.0
- ExecRestatement Reason contained in both, immediate execution responses and new order response messages
  - ExecRestatement Reason "205" only relevant for Sweep Orders (also for order entry in CLOB, see "New Order Response" message)
- MatchType and FillLiquidityInd only for execution messages
  - MatchType "12" (auto match at midpoint) only if all fills generated by incoming order are in midpoint book, otherwise (if in both, midpoint book and CLOB) MatchType is "4" (auto-match incoming order)
- FillsGroup part includes FillLiquidityInd field, multiple instances reported per each filled resting order
  - "101" for immediate execution in midpoint book
  - "2" for immediate execution in CLOB (Sweep Orders only)
- In case of Sweep Orders, Execution Response or New Order Response is sent only once after full processing of order across both midpoint book and CLOB

27/09/24

Book Order Execution

	Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
Message Body (1x)	574	MatchType	Y	1	173	unsigned int	The point in the matching process at which this trade was matched.
FillGrp (n)	1443	>FillLiquidityInd	N	1	200	unsigned int	Indicates whether the order added or removed liquidity. Required only for execution reports generated for fills.

MatchType values (Tag 574):

Value	Description
4	Auto-match incoming order
5	Cross Auction
7	Call Auction
11	Auto match resting order
14	Continuous Aution
12	Auto match at midpoint

FillLiquidityInd values (Tag 1443):

Value	Description
1	Added Liquidity
100	Added Liquidity Midpoint
4	Auction
5	Triggered Stop Order
6	Triggered OCO Order
7	Triggered Market Order

- See "Book Order Execution", T7 Enhanced Trading Interface Cash Message Reference, Release 13.0
- Only relevant for Midpoint Orders resting in Midpoint book (sweep orders transferred to CLOB are treated like "normal" orders (i.e. without any Midpoint Type)
- MatchType "12" in general Message Body
- FillsGroup part includes FillLiquidityInd field
  - "100" for passive execution resting midpoint order in midpoint book

27/09/24

Trade Notification

Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
574	MatchType	N	1	256	unsigned int	The point in the matching process at which this trade was matched. The value 3 (reporting from recognized markets) represents trades entered by Market Supervision

Value	Description
3	Confirmed Trade Report (reporting from recognized markets)
4	Auto-match incoming order
5	Cross Auction
7	Call Auction
11	Auto match resting order
12	Auto match at midpoint
14	Continuous Aution
15	Retail

Tag	Field Name	Req'd	Len	Ofs	Data Type	Description
20473	RootParty-IDExecutionVenue	N	4	497	Fixed String	Market Segment Identification Code Valid characters: \x20, \x22-\x7B, \x7D, \x7E

- See "Trade Notification", T7 Enhanced Trading Interface Cash Message Reference, Release 13.0
- MatchType "12"
- RootPartyIDExecutionVenue contains relevant Xetra Midpoint Segment MIC
  - XEMA – Regulated Market
  - XEMB – Open Market
  - XEMI - Scale

Market Data

Tag	Field Name	Req'd	Data Type	Description
277	> TradeCondition	N	Trade-Condition (set)	**AW = Last Auction Price** cannot be combined with any other value and has its own entry in order to convey the auction type through *TrdType (828)*.

XR = Retail price is used to report prices resulting from Retail orders (applicable for cash market products only).

BB = Midpoint Price is used to report prices resulting from midpoint orders (applicable for cash market products only).

Value	Description
U	Exchange Last
R	Opening Price
AX	High Price
AY	Low Price
AJ	Official Closing Price
AW	Last Auction Price
BD	Previous Closing Price
XR	Retail
BB	Midpoint Price

- See "Depth Snapshot Message" and "Depth Incremental Message" in EMDI / MDI, T7 Market and Reference Data Interfaces Manual, Release 13.0

- Trade Condition "BB" for Midpoint trades (also for EOBI messages "trade report", "trade reversal" and "instrument snapshot")

- Following Midpoint information will be available in T7 GUI Market view:
  - → LstMidpointPrc (like LstPrc)
  - → LstMidpointQty (like LstQty)
  - → LstMidpointTime (like LstTime)

27/09/24

Order Book

- No pre-trade transparency – Xetra Midpoint is a dark pool

- EOBI messages "trade report", "trade reversal" and "instrument snapshot" will contain same TradeCondition ("BB") as in market data

Disclaimer

Thank you!

Maximilian Trossbach
Vice President Cash Market Business Development Wholesale

Deutsche Börse AG
Mergenthalerallee 61
65760 Eschborn

Phone +49 69 211 14304
E-mail   maximilian.trossbach@deutsche-boerse.com

OpenDay
2024

DEUTSCHE BÖRSE
GROUP