

# MoC – Market on Close

Listed Solution for Basis Trading

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# 1 Basis Trading

# About Basis Trading

## Today, futures trading for MoC in Europe takes place mainly in the OTC market

- Agreement on the basis (difference between current futures price minus the current cash index level) occurs mainly in the Inter-Dealer-Broker market
- Market participants enter the futures trades into the Eurex system only after the closing level of the index is available

## The final futures price has usually two decimal points

- The quotation of the basis in EURO STOXX 50<sup>®</sup> index futures is usually between 0.10 and 0.25 ticks, and
- The closing index of the EURO STOXX 50<sup>®</sup> has 2 decimals

## Current way of trading has several drawbacks

- High slippage costs
- No straight-through-processing and higher manual effort (transactions must be worked at least twice)
- High operational effort on client side
- Risk management possible only after the index close as the transactions can only be entered into the Eurex system after the complete price is available

## MoC transactions have a higher likelihood of slippage costs as the traded price usually deviates from the calculated final futures price

- To achieve the exact final futures price, one MoC transaction must be split into several trades, as the final price is more granular than the tick size of the index futures
- MoC transactions need to have sufficient size to be able to be split due to the respective minimum block trade size
- If the size is not sufficiently large, MoC transactions are entered into the orderbook to achieve the index close price by averaging around the time of the index cash close determination
- As a result, only very large transactions can avoid slippage costs

# 2 MoC Future on Euro STOXX 50<sup>®</sup>

# Product Summary for MoC future (FES1)

## Key Drivers & Objectives

### Increase efficiency for market participants

- Straight-through-process for market on close transactions to reduce front office workload
- After the basis has been traded, Eurex will automatically add the index close level to the agreed basis (initial basis futures price) once the cash market index close is available

### Enhance market transparency and consolidate liquidity of current OTC markets

- Order book trading to offer immediate liquidity and price information
- Off-book transactions to facilitate bilateral transactions of larger scale

### Elimination of slippage risk for market on close transactions

- Smaller tick size of MoC futures to offer more precise pricing
- Cash market index close level will be offered according to market conventions

### Immediate availability of index futures after settlement

- Delivery of underlying to occur intra-day and will be tradable immediately

### Immediate risk management by Eurex Clearing

- MoC trades will immediately after the transaction of the basis be included into the risk management system of market participants
- CCP to mitigate counterparty risk

## Possible Applications

### Hedging/trading of financial instruments benchmarked against the index close

- Exchange Traded Funds
- Index options and structured products
- OTC swaps and options
- Cash equitization and balance sheet management

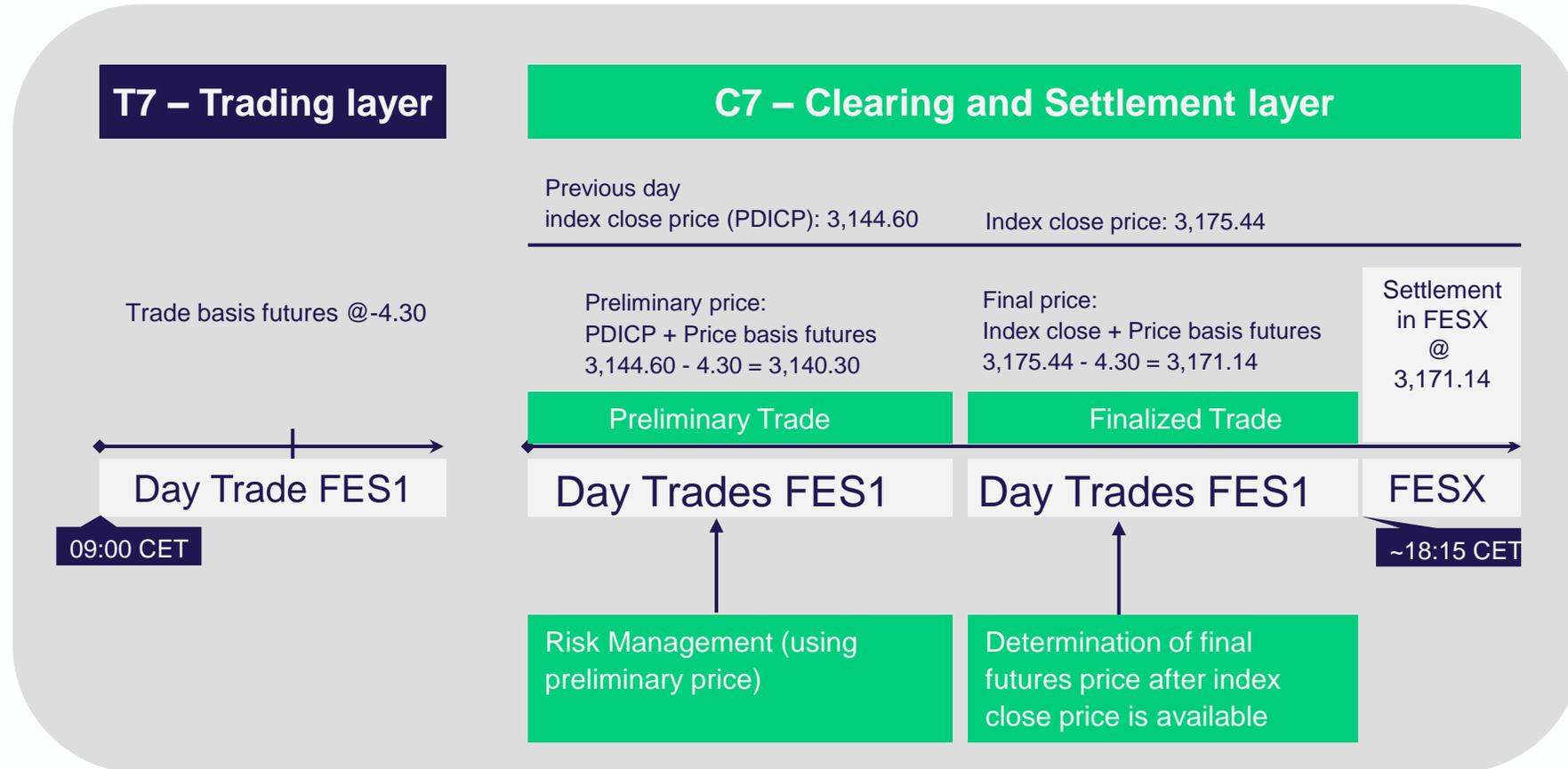
# Product Structure (1/2)

	Description
<b>Underlying</b>	<ul style="list-style-type: none"><li>▪ EURO STOXX 50® index futures (FESX)</li><li>▪ Additional index futures may be listed at a later stage</li></ul>
<b>Trading</b>	<ul style="list-style-type: none"><li>▪ Execution of the MoC futures will be possible in the order book and via the Eurex Trade Entry Services (e.g. Block Trades)</li><li>▪ Own product ID for MoC futures to process non-final trades intraday as not the complete information to determine the futures price of the underlying futures is available at the time of trading</li><li>▪ MoC futures are settled on a daily basis after the cash index close is available (daily futures)<ul style="list-style-type: none"><li>• Up to nine months of the underlying EURO STOXX 50® index futures will be available for MoC transactions</li><li>• After the end of the trading day all remaining orders will be deleted</li><li>• No trading in MoC futures will be offered on the last trading day of the maturing underlying futures</li></ul></li></ul>
<b>Tick sizes</b>	EUR 0,10 compared to EUR 1.00 for EURO STOXX 50® index futures
<b>Price quotation</b>	<ul style="list-style-type: none"><li>▪ In the Eurex trading system T7, only the bases will be traded</li><li>▪ The price of the basis may become negative in the Eurex trading system T7</li><li>▪ However, in the Eurex clearing system C7, the price will always be positive due to addition of the previous day index close price (PDICP) as preliminary</li></ul>

# Product Structure (2/2)

	Description
<b>Final settlement price</b>	<ul style="list-style-type: none"><li>▪ For determination of the final settlement price of the MoC futures the traded price of the basis will be added to the official index close</li><li>▪ The exact index close value of the EURO STOXX 50® index with two decimals will be used</li><li>▪ Based on the final settlement price, each transaction in the underlying futures will create a position in the EURO STOXX 50® index futures and the transaction becomes final</li></ul>
<b>Miscellaneous</b>	<ul style="list-style-type: none"><li>▪ After conclusion of a transaction in the Eurex MoC futures, a counterparty will be mandatorily settled into the underlying futures</li><li>▪ Give-up/take-up will be possible at any time</li><li>▪ No close-out transactions will be possible, e.g. two transactions of 100 contracts long and 100 contract short will be individually settled (netting-out would occur on the underlying futures only)</li><li>▪ Exception will be mistrades which will lead to a cancellation of the transaction of the basis futures</li><li>▪ The price of the opened position of the EURO STOXX 50® index futures will be with two decimals and deviates from the regular tick size in this index future</li></ul>

# Process Flow



# Contract Specifications

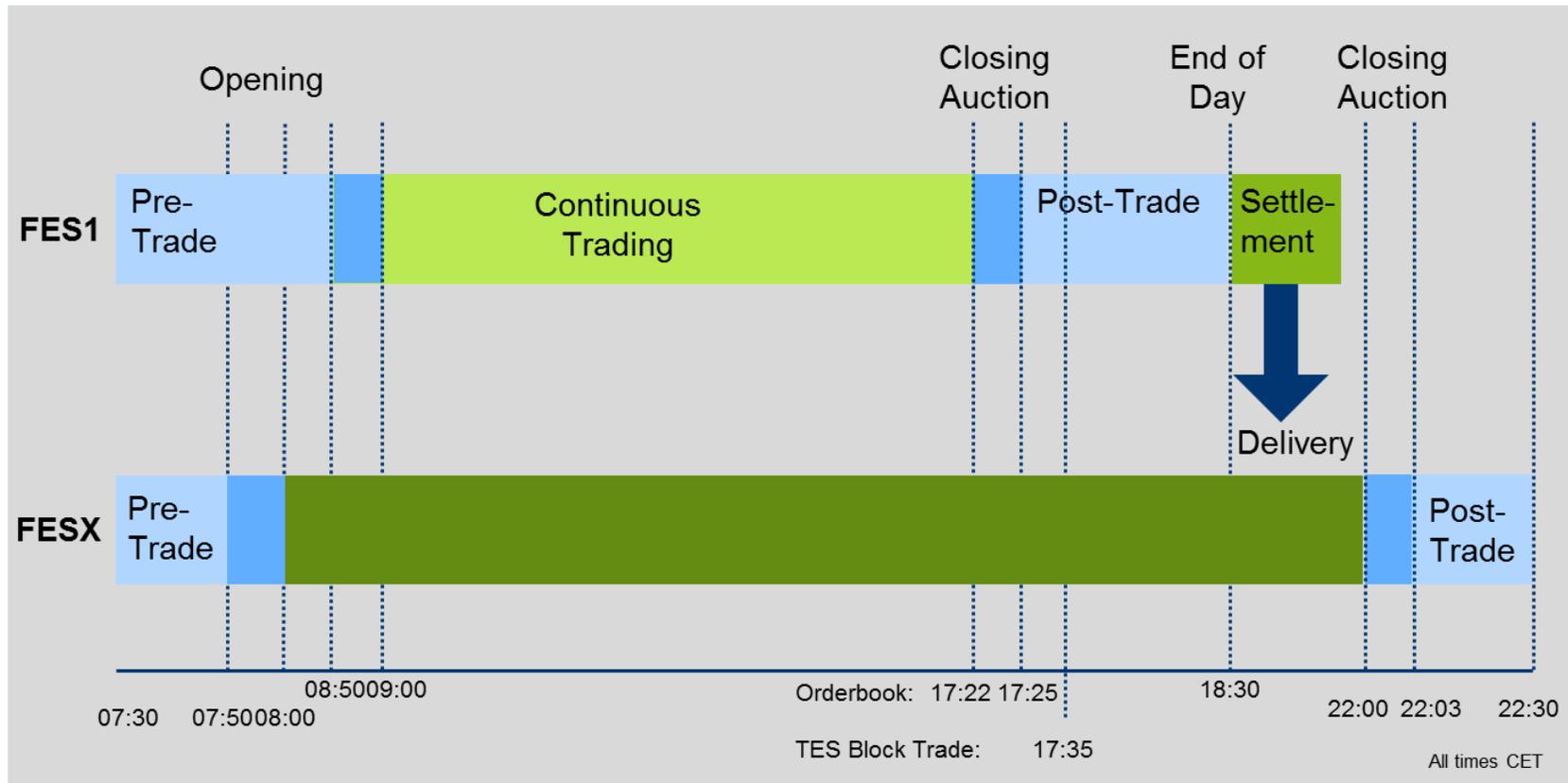
## Eurex MoC Futures on Euro STOXX 50<sup>®</sup> index futures

	Description
<b>Underlying futures</b>	Euro STOXX 50 <sup>®</sup> index futures (FESX)
<b>Contract size</b>	1 contract
<b>Settlement</b>	Transaction-based, physical settlement of the Euro STOXX 50 <sup>®</sup> index futures Settlement occurs from the traded maturity of the FES1 into the corresponding maturities of the FESX
<b>Delivery</b>	Intraday delivery into underlying futures (FESX)
<b>Offered contracts</b>	First three maturities of the underlying index futures (up to 9 months)*
<b>Tick Size</b>	0.10 index points (represents EUR 1 of the underlying futures) compared to 1.0 index points for FESX
<b>Contract Quotation</b>	Price of the basis in index points, and may be positive or negative
<b>Trading Hours</b>	Order book: 09:00 – 17:25 CET, including closing auction TES block trade entry: 09:00 – 17:35 CET
<b>Trading holidays</b>	Identical to underlying futures. No trading on the final settlement day of the underlying futures
<b>Final Settlement Day</b>	Each Trading Day
<b>Final Settlement Price</b>	The Final Settlement Price is established by Eurex on the Final Settlement Day of the contract and is determined as the official closing value of the Euro STOXX 50 <sup>®</sup> index plus the traded basis price of the Eurex MoC futures
<b>Min. TES Block Trade Size</b>	100 contracts

\* FESX has a term of up to 24 months

# Trading Phases

## Timetable



# Your benefits trading Basis Futures at Eurex



## Easy Access & Transparency

- Quotation of the basis in +/- index points equal to OTC market offering market standards
- **Equal access** for all market participants to order book (no minimum size required)
- **Higher transparency** of the basis price via publicly available order book
- **TES Block trading** available
- Min block trade size for Eurex MoC Futures on Euro STOXX 50<sup>®</sup> futures: 500 contracts



## Lower Risks & Costs

- **No slippage costs** with futures pricing at market standards (Futures: 0.10 index points, Index: 2 decimals)
- **Lower tracking error** for smaller sized orders executed at more accurate prices compared to the usually used average pricing method around the cash market close
- **Lower transaction costs** compared to the OTC market
- **Immediate risk management** by Eurex Clearing CCP will reduce operational risk



## Higher Efficiency

- **Less transactions and better pricing capabilities** reduce the need to split trades in the underlying index futures
- Euro STOXX 50<sup>®</sup> Index futures (FESX) **immediately available intraday** after settlement around 18:30 CET
- **Fully automated process** compared to current OTC solution with transactions to be processed manually and handled twice (at time of agreement and after the index close is available)

# 3 Pricing and Reporting

# Fee & Pricing

<b>FES1 in EUR</b>	<b>M-Account</b>	<b>P-Account</b>	<b>A-Account</b>
Order book	0.00	0.00	0.00
TES Block Trade	0.00	0.00	0.00

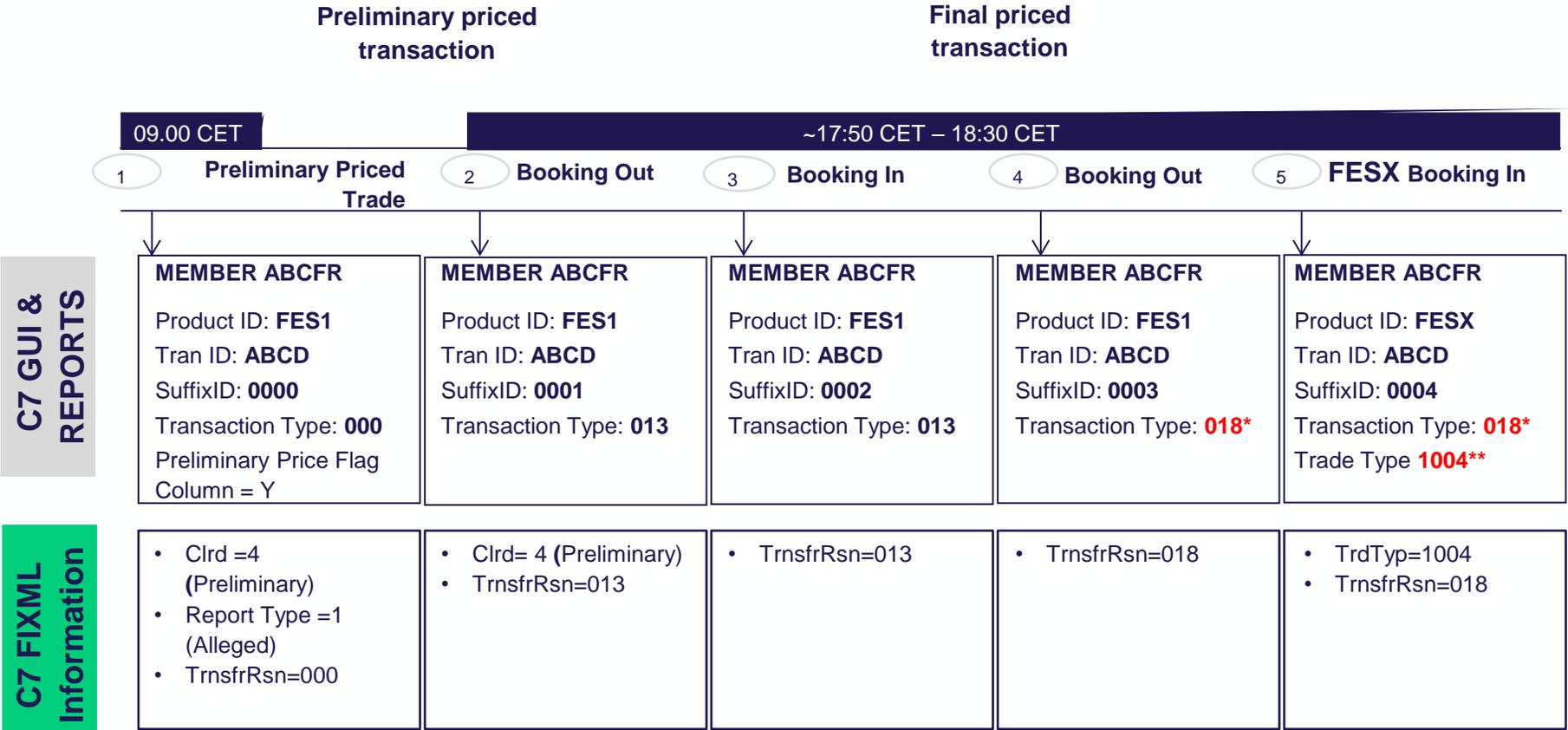
<b>FESX in EUR</b>	<b>M-Account</b>	<b>P-Account</b>	<b>A-Account</b>
Order book	0.32	0.32	0.38
TES Block Trade	0.48	0.48	0.56

# Transaction Reporting Requirements

- The transaction reporting requirements for Eurex MoC futures were discussed in the ESMA working group
- BaFin informed Eurex about the results of this discussion and requested to inform Eurex' clients accordingly
- Eurex understands the transaction reporting requirements for the Basis Futures and the corresponding underlying futures as follows:

Relevant Regulatory Act	Reporting Requirements at t+1
EMIR Art. 9	<ul style="list-style-type: none"> <li>• As only the 'end of day'-state of a transaction is reported for EMIR Art 9 the transactions of the Basis Futures are not reported at all</li> <li>• Thus, only the final state with the underlying futures FESX is reported with the final price (Step 5 next page)</li> </ul>
MIFIR (MIFID II) Art. 26 Trading Focus	<ul style="list-style-type: none"> <li>• Transaction of the original Basis Futures (FES1) with final price only (Step 3 next page)</li> <li>• Settlement transaction of Underlying Futures (FESX) not required</li> <li>• Please note: original Basis Futures transactions (<u>before</u> Give up) have to be reported with the final price</li> </ul>
	<p>Reasoning BaFin:</p> <ul style="list-style-type: none"> <li>• The buy/sell transaction of a FES1 already creates a binding agreement</li> <li>• Usage of individual ISINs for both products</li> <li>• Always original transaction has to be reported for MIFIR</li> </ul>

# Clearing FES1 Full Service Transaction



\* Transaction type for transaction based settlement for GUI & Reports, (FIXML) = Transfer Reason

\*\* Trade Type for MoC FESX GUI, Reports & FIXML

3 Reportable FES1 transaction (see slide 11)

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