



T7 Release 11.0

Derivatives Market

September 2022



Agenda (1/2)

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Overview & Introduction



Overview of Eurex T7 Release 11.0

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Non-Friday Weekly Options Contracts (Monday & Wednesday Weekly Option Contracts)

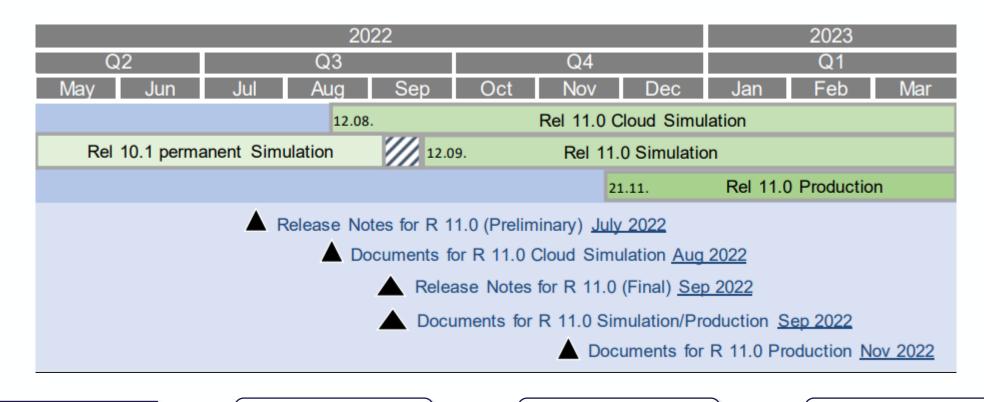
Pre-Trade Risk Limits Enhancements for Options

FIA Execution Source Code (tag 1031)

Herfindahl Hirschman Index Indication via T7 EOBI

Backwards compatibility for trading interfaces	NO
Backwards compatibility for market and reference data interfaces	NO

Introduction Schedule



Release Milestones **T7 Cloud Simu** 12 Aug 2022



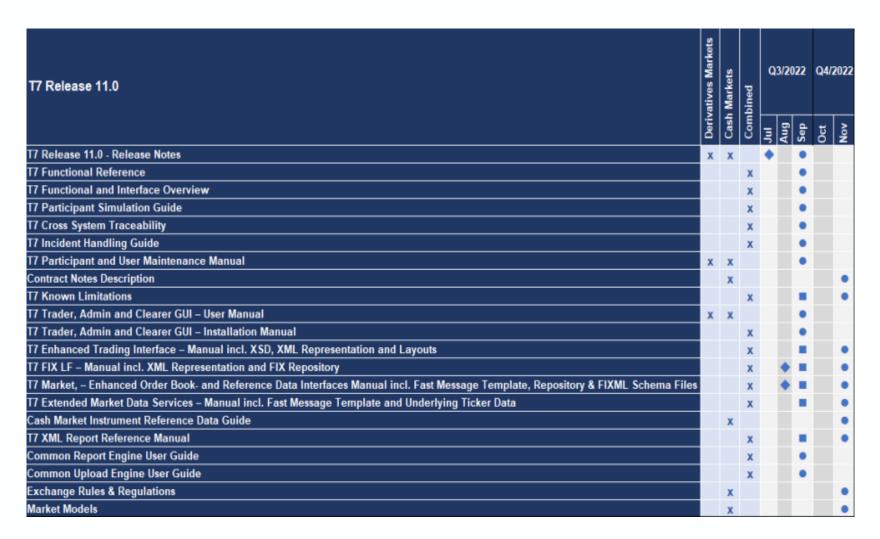
Simulation 12 Sept 2022



Production

21 Nov 2022

Publication Schedule



- Cloud Simulation (identified by ◆) to be published in July/ August 2022
- Simulation versions
 (identified by ■) to be published
 in September 2022
- Production versions

 (identified by ●) to be published
 in September/November 2022
- All documents available on <u>www.eurex.com</u> under: Support > Initiatives & Releases > T7 Releases > T7 Release 11.0

EUREX 7



Pre-Trade Risk Limits (PTRL) Enhancements for Options



Eurex makes PTRL more suitable for options trading

Motivation

- Eurex has originally introduced PTRLs for THX futures (order book & TES) in 2018
- With T7 R10.0 Eurex has also introduced PTRL for Futures Spreads
- Until now, option products remained out of scope for PTRL

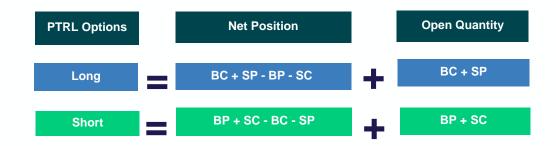
Main Features

- Eurex will introduce scope enhancements for PTRL for options providing
 - put/call differentiation consumption
 - order/quote differentiation on limit consumption
 - incorporation of futures legs of an limit option volatility strategies
 - possible delta adjustments of volumes
- Eurex targets a stepwise activation of PTRL for options functionality

For options, following improvements are implemented (1)

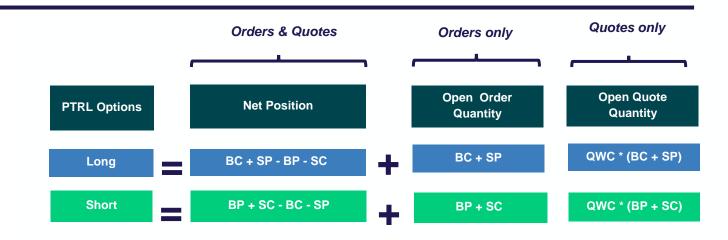
Limit Aggregation

 Puts/Calls counted based on their position effect, i.e., Buy Call (BC) & Sell Put (SP) count to long position, while Buy Put (BP) & Sell Call (SC) to short position



Quote Separation (optional feature)

Contribution of quotes to Open
 Quantity limits will be adjustable by
 Quote Weighting Coefficient (QWC)
 adjusting weight for quotes between
 0% -100% as long as they are in the book



For options, following improvements are implemented (2)

Delta Equivalent Futures Quantities

- For the risk profile of each options instrument (complex & simple) while consuming PTRL, Delta
 Equivalent Futures Instrument quantities will be applied for option PTRL consumption based on a
 fixed, end-of-previous day instrument specific option-delta that will weigh each order and quote
 incoming transaction as well as when it is executed
- Instrument specific constant deltas will be published via reference data valid per day

Complex Instrument treatment

- Like Future Spreads, complex instruments in options will affect the PTRL consumption as a whole & will no longer be broken down to leg instrument components
- Specifically, for option volatility strategies (OVS), this will change the treatment for underlying futures leg reg. PTRL consumption. Corresponding futures underlying quantity of an OVS will be considered in respective long or short Net Position & Open Quantity of reference Option PTRL consumption for OVS.



Fixed Income Total Return Futures (TRF) for French Government Bonds



Technical introduction of Fixed Income Total Return Futures for French Government Bonds

- Eurex already offers trading in Equity/Equity Index TRFs
- **Motivation** With T7 11.0, Eurex introduces the technical means to offer French government bond TRFs (i.e., technical launch only)

Main **Features**

- Existing TRF will be enhanced to support Fixed Income specific characteristics:
 - New valid value in the existing TRFType field "Fixed Income TRF" (TRFType only published in Report TA115)
 - New attribute *CurrentAccruedInterestAmt* (distributed in RDI/RDF) for the accrued distribution from the coupon of current coupon period needed for calculation of the Basis for FI TRF
 - Launch of French government bonds TRF will be announced separately at a later stage



Herfindahl Hirschman Index (HHI) Indication via T7 EOBI





HHI indication enables better assessment of available liquidity

Motivation

■ Participants can evaluate the quality of the available liquidity (in terms of member concentration) based on Eurex' *indication* of the *Herfindahl Hirschman Index* (HHI) for the order book, which is **only** part of the existing EOBI market data feed

Main Features

- The HHI gives more weight to orders of larger size
- Market shares used to calculate the HHI are based on Business Unit level
- The HHI is only enabled for simple instruments of selected very liquid futures and only for the order book
- In order to not disclose too much information, the HHI indication (not the HHI itself) will be published
- Two separate HHI indications calculated: Orderbook & Trading HHI (synthetic orders in match events are not considered)
- Eurex' indications are based on intervals predefined by the exchange and published via the T7 reference data

HHI Indicators will only be published during continuous trading

Orderbook HHI

- Order book HHI indication is calculated for the entire order book per price level
- Order book HHI indication will be included into each market data message impacting the order book



- Trading HHI indication is calculated based on the passive side of each order book trade
- Trading HHI indication will be included in each Execution Summary message
- Trading HHI indication for a trade resulting from auction trade will not be published



5 Non-Friday Weekly Options contracts





Technical introduction of Non-Friday Weekly Options Contracts as part of Next Generation ETD



Technical steps will be introduced to integrate Non-Friday weekly options (supplementing existing Friday weekly options contracts introduced by Next Gen ETD)



Contract information of T7 ref data will also contain weekday of weekly option in case of contract display instruction identical to "week of month"

Example: In T7 Trader GUI, extension *-Fri* will be enhanced to also cover non-Friday options *OESX Nov21-W1Mon 3800 C*



Display of contract name in T7 GUIs & T7 ref data will be extended to include integrated weekly options contracts with additional weekly expirations (i.e. display day will switch from two to three characters, Fr > Fri)



Production launch of additional integrated Non-Friday weekly options will be announced later (i.e. will take place after integrated Fridays Weekly Options contracts are completely introduced)

First requirement launch after & benefitting from Next Gen Initiative

Status Quo

- Non-Friday weekly options are part of T7 Release 11.0 due to reference data enhancements & T7 GUI adaptations
- No adjustments are made in clearing (C7 R9.0) & risk management (Prisma R12.0) since already existing functionality introduced by Next Gen is sufficient for handling non-Friday weekly options
- Data providers were informed about reference data change (see Eurex Circular 029/22)

Simu

- For testing in Simu, set-up of non-Friday weekly options as Tuesday weekly options (OESC) is planned for 2nd half of October 2022 after integration of weekly options in OESX (from 22 Sep to 13 Oct) is concluded
- Tuesday weekly options are preferred non-Friday weekly options in Simu since Tuesday & Thursday are business days used at most in Simu (Thursday replaces the prod Friday weekly options)

Prod

- Activation of non-Friday weekly options planned for 2nd half of Q2 2023 after prod launch of T7 R11.1 & C7 R 9.1
- Non-Friday weekly options will be launched as Monday & Wednesday weekly options complementing
 Friday weekly options available at that point in time
- Increased testing opportunities will be offered during Simu of T7 R 11.1 & C7 R9.1 (April/Mai 2023)



6 FIA Execution Source Code (tag 1031)



With T7 11.0 Eurex will introduce mandatory use of FIA tag 1031 for Agency orders

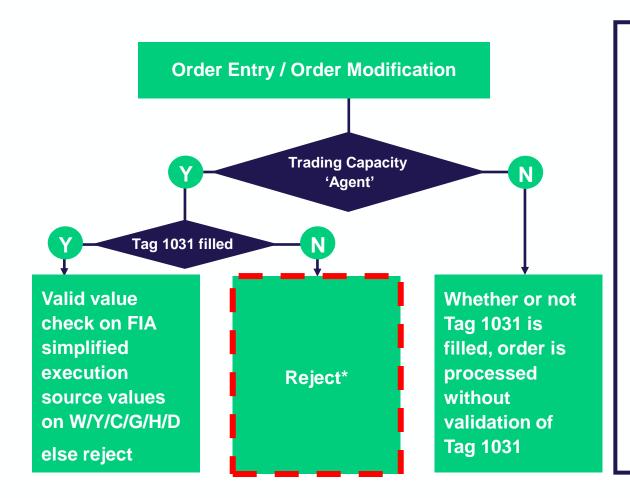
Background

- The FIA Execution Source Code, tag 1031, is an FIA led industry initiative to provide futures industry participants with a standardized data schema that aims to clearly identify the execution method used for ETD trades at point of origin, allowing executing & clearing brokers to easily reference the appropriate brokerage rate for the execution method
- Eurex is one of several exchanges that has supported tag 1031 in both order entry and respective clearing messages, but usage was not mandatory
- With T7 9.0 (Nov 2020), Eurex made tag 1031 functionally mandatory and with T7 10.0 (Nov 2021) Eurex added tag 1031 to the enrichment of short order layout based on client request

What's coming

With T7 11.0, Eurex will introduce the field "custOrderHandlingInst" (known as RateID or FIA tag 1031), which will become technically mandatory for Trading Capacity "Agent" orders

Future Solution - Mandatory on Trading Capacity "Agent"



Future Setup

Orders send with Trading Capacity "Agent" are validated on:

- Valid values are checked on FIA simplified execution source code values
- Orders with invalid values are rejected
- Applied on standard order layout and short order layout, for CLOB, TES and Eurex EnLight – also available via Eurex GUI
- No checks are performed on trading capacity "Proprietary" and "Market Making"
- No checks are performed on quotes
- Clients & ISVs need to program against these changes



^{*} Previously if no value was sent, default "D" was applied at Matching Engine



Introduction of Opening-Auction-Only and Auction-Only Order Types





With T7 11.0 Eurex will introduce new Order Types for Opening-Auction-Only & Auction-Only*

Motivation

 Additionally to existing order type Closing Auction Orders CAO, Eurex will add Opening-Auction-Orders OAO and Auctions-Only Orders AOO (technical launch only)

Main Features

- Orders that can be entered as Limit or Market orders can take part (depending on type):
 - during an opening auction only
 - during a closing auction only
 - during auctions only (i.e., during opening & closing auctions)
- Interfaces (ETI, FIX LF, T7 Trading GUI and reports) will be impacted
- The introduction strategy will take place after the release introduction and be communicated separately via circular
 - Planned to enable orders for opening auctions for all futures & options
 - Futures that are already enabled for closing auctions, will keep this functionality & will be additionally enabled for opening auctions



8 Strips for Dividend Futures





Enhancements to instrument type *Strips* to support Dividend Futures

Existing Complex
Instrument type 'Strips' will
be enhanced to support
trading in Dividend Futures
via TES or orderbook

Strips for Dividend Futures will also support average pricing* (Strips for FI Futures support average net change pricing)

No impact on interfaces



Clearing Price of Trade-at-Market Trades (TAM) for Initiating Brokers (IB)





Clearing Price of TAM Trades for Initiating Brokers

Motivation

- Currently, Initiating Brokers (IB) do not receive clearing price when entering TES trades for their clients (only clients receive the clearing price via TES broadcast)
- Distribution of the clearing price to IB improves reconciliation process & increases market efficiency

What's coming

- IB receives clearing price via ETI TES broadcasts & in the GUI
- With T7 11.0, the clearing price will be added to the TES Broadcast that IBs receive
- Clients & ISVs need to program against the new field introduced
- IBs will receive clearing price of following TES trades:
 - Total Return Futures
 - Baskets of Total Return Futures (BTRF)
 - Equity Bespoke Baskets (EBB)
 - Variance Futures



10 Validation of the Custom-Underlying-Price in TAM TES Trades



Validation of the Custom-Underlying-Price in TAM TES Trades

Motivation

 Eurex aims to reduce fat finger checks on the bilaterally agreed underlying price manually entered by customers

What's coming

- Custom underlying price of all Trade-at-Market (TAM) TES trades (submitted via GUI/ETI) will be validated against a range around the previous day's underlying closing price of the underlying asset
- A hard validation will be introduced against a range around the previous day's underlying closing price of the customer provided custom-underlying-price
- Be aware that clients will be impacted by this functionality in case they exceed the range around the previous day's underlying closing price!
- If the custom underlying price will be outside this range, trade entry/modification/ amendment/substitution will be rejected

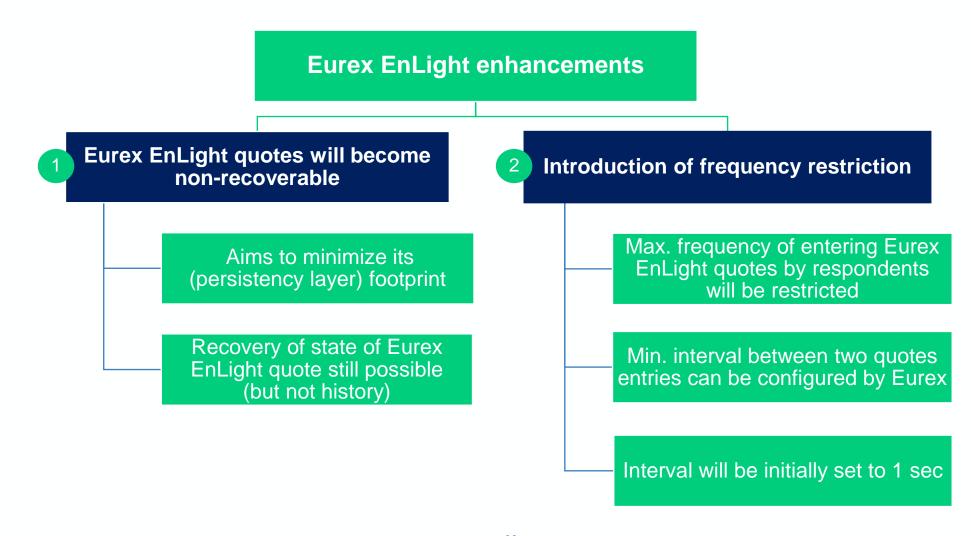


Non-recoverable Eurex EnLight Quotes and Frequency Restrictions



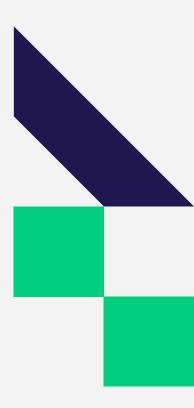


Non-recoverable Eurex EnLight Quotes & Frequency Restrictions





12 Off-book Trades via T7 EOBI





Off-book Trades via T7 EOBI

- Currently, T7 EOBI provides entire visible order book by publishing information on each individual order & quote side along with executions & state information in real-time & un-netted
- Currently, only EMDI (and NOT EOBI) provides information for off-book transactions
 - With T7 11.0, trading participants will be enabled to use EOBI interface for both on-book & off-book transactions
 - Clients and ISVs will need to support new tags in EOBI

TES reporting in EOBI will work in same way as in EMDI today



Remove Quote Activation 1 3 Delay for Passive Liquidity Protection (PLP) Products

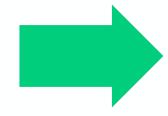


Remove Quote Activation Delay for PLP Products

Background

- By differentiating latency in option markets, Eurex ensures that trading participants strengthen their focus on serving needs of end-clients & grow the market as a whole
- With PLP, Eurex aims to further improve the liquidity picture and price discovery process of the order book where price discovery is significantly driven by underlying or exogenous markets
- Currently, when PLP is used, there is a deferral time for orders in case they are executable against the quote and an additional delay when reactivating quotes

Eurex will remove the additional delay imposed on quote activations for all products where Passive Liquidity Protection (PLP) is activated



This will not affect PLP deferral time for these products, but only separate delay on quote activations



14 Message Encryption for ETI Low Frequency Gateways



Payload Encyrption for ETI

An additional ETI connectivity option via an additional port will be provided supporting payload encryption



Key Features

- Additional connectivity option for ETI LF Gateways will be offered, supporting Payload Encryption via OpenSSL (TLS 1.2 – restricted cipher-suites)
- Further details contained in the Network Access Guide at:

 Eurex.com > Initiatives & Releases > T7 Release 11.0 > System Documentation



15 Changes to Short Code processing logic (Modifications in XML report field and XML report TR 166)



Key Changes

MiFIR Reporting: Adaptation of Shortcode-Longcode processing

Differentiation between StatusIndicators N and M

- New records must be registered with StatusIndicator N and will be rejected if the shortcode in the affected mapping is already registered for that MemberID and MIC
- Modfication of existing records must be conducted with StatusIndicator M and will be rejected if the shortcode in the affected mapping is not already registered for that MemberID and MIC

Changes to acceptable ValidFromDates depending on the StatusIndicator

- Modifications and Deletions (StatusInd M or D) no longer accepted with ValidFrom T-1 or T
- ValidFromDates in the future restricted to T+1 for all Status Indicators

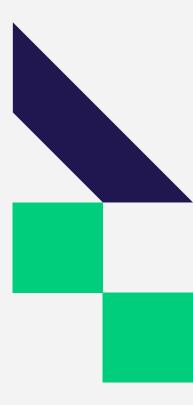
Rejection of modifications (StatusIndicator M) that would result in the ClassificationRule changing

Enhancement of the TR166 Identifier Mapping Final Error report to include lists of all affected short codes in addition to the counts in the current format

Related Documentation	
Eurex Circular 082/22	www.eurex.com > Circulars & Mailings
Reporting Handbook MiFID II/MiFIR v.3.7	www.eurex.com > Rules & Regs > MiFIR II/MiFIR > Reporting
T7 XML Report Reference Manual v.110.2.4 (for TR166 changes)	www.eurex.com > Support > Initiatives & Releases > T7 Release 11.0



Further Changes and Enhancements



Further Changes and Enhancements (1/3)

NextGen: Various Improvements	 Improved Price Decomposition of Basis Calendar Spreads Modified Mnemonic Generation for Calendar Spreads Contract Generation Number not to be reset anymore
Eurex EnLight - Trading with Third-Party Platformes Involved	 New business model provides new field ChargeID in various messages (indicates that third party is involved which does extra charging) Billing and collection of these extra third-party fees takes place outside T7
TAM TES Trades in Variance Futures - Type <i>Block TAM</i>	 TAM TES trades in Variance Futures will be entered with TES type Trade-at-Market to make them consistent with other cases of TAM TES trading
Change in Historical ETI News handling & risk notification messages	 Sequence number of ETI News & ETI risk notification messages will be reset to 1 overnight each day (no historical messages via ETI) Historical News messages will be offered via T7 Trader GUI & historical risk notification messages will not be offered anymore
T7 Trader GUI Improvements	 Improved Display of Flexible Options Contracts Automatic Filtering in other Views for Eurex EnLight Display of NonDisclosureLimit for Eurex EnLight Trades Sharing Sides of Eurex EnLight RfQ made Default Filter for Strategy type in <i>Market view</i> enhanced

Further Changes and Enhancements (2/3)

New Field in TES Profile	■ TES Profile will be enhanced by the optional field MinLotSizeNonPrimary
Maximum TSL Consumption in XML Reports	 Risk user experience will be improved by additional fields for maximum TSL Consumption in XML reports Several field to be added in RD215 Clearing Member Defined TSL Status, RD225 Trading Member Defined TSL Status
New field in TR100 OTR Ratio	 New field rptCutOffTime added to reflect timestamp of last transaction per product considered for calculating ordered volume & orders count (currently reports go out without info, if reports complete or not)
Eure Improve BU Groups	 Exchange will define groups of participants respectively of BU in T7 reference data (Eurex Improve BU Groups) Groups will serve to define allowed Eurex Improve relationships between counterparties in Eurex Improve
DSCP in EOBI to indicate unchanged BBO	 Differentiated Services Field Codepoints (DSCP) in packet header for EOBI messages will reflect special situation when matching order does not improve Best Bid Offer (BBO) while moving the midpoint of best bid and ask

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Further Changes and Enhancements (3/3)

New product-specific Field in RDI/RDF	 Product-specific contract date type will be introduced, indicating unambiguous interpretation of contract date New field will be published in RDI / RDF interfaces for each single leg instrument as optional field alongside existing field contract date
Inactive New Instrument Type	 Support of new instrument type Commodity Strips will become possible This instrument type will not be activated for Eurex, but Eurex participants will encounter some technical changes in interfaces
Change in Advanced Risk Protection (ARP) with Release C7 Release 9.0	 With C7 Release 9.0 change in ARP concerning level 3 breaches with impact on member specific orders and quotes maintained in T7 will occur Reg. further information please refer to § 2.2 of C7 9.0 Release Notes under eurex.com > Clear > Support > Initiatives & Releases > C7 Releases > C7 Release 9.0 > System Documentation > Overview and Functionality > Release Notes (C7 Release 9.0)





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@eurexchange.com





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