

Eurex Roadmap 2018

Welcome to the Eurex Roadmap Workshop!

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

Agenda

- Regulatory update
- T7 release 6.1 and T7 release 7.0 introduction
- Eurex EnLight – Introduction of new functionality
- Brexit – updates
- Product roadmap 2018
- Trading Hours Extention
- Eurex Clearing introduction
- Eurex Clearing's C7 release
- Eurex Clearing Prisma release
- EurexOTC Clear

Regulatory Update

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

Overview on regulatory topics: past, present and future

Installed Regulation

- Beginning of 2018 the market implemented the requirements of PRIIPs* Regulation, the EU Benchmark Regulation and the most comprehensive of all, MiFIR/ MiFID II**
- While implementation has been achieved, some ongoing aspects might need to be addressed by stakeholders of financial markets
- A short overview of what has been achieved is reflected upon, as well as some reminders included

Current Legislative Proposal

- The Investment Firm Review is currently discussed among legislators, regulators and financial industry participants
- The proposal is still at an intermediate stage of the legislative process between European Commission, Parliament and Council, and is expected as new legislation, adjacent to the Capital Requirements Regulation

Outlook 2018/ 2019

- After MiFIR implementation, many will be occupied with analysing unintended consequences resulting from MiFIR/ MiFID II, observing favourable and unfavourable developments
- Brexit is a game changer, and at the current stage still no details can be discussed, as long as political discussions are ongoing



Installed Regulation – Achievements & Reminders (1/2)

MiFIR/
MiFID II

Some figures to illustrate the extent of implementation efforts in 2017

- During 2017: Record 400+ participants in MiFID II customer workshops in Europe and US;
- Approx. 14.000 individual customer enquiries and issues answered; 10.000+ Trader National IDs and all Eurex member LEIs collected; more than 5.000 follow-up calls conducted to ensure completeness
- In total 735 scope elements with technical, functional or legal customer impact were identified
- Just the T7 release preparation took 18 months, in total 15 impacted IT systems
- The areas with ongoing customer focus are: third country firms, reporting, transparency and regulatory market making

Further information

Third country firms

https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Anlage/171205_Informationenblatt_Erlaubnispflicht_grenzueberschreitendeGe_en.html;jsessionid=324FD2E24631221E82F4462D1F952CA0.2_cid363

http://www.eurexchange.com/blob/3335472/857d9b8fe9c32c5e09700d1241a68f12/data/Transitional-Period-for-3rd-Country-Firms_Process.pdf

Reporting

<http://www.eurexchange.com/blob/3174552/26eb8c50492c438d432341fc59d2aeb6/data/Reporting-Manual---MiFID-II.pdf>

<http://www.eurexchange.com/blob/3140894/a2ca5ef4cf3433119a814800005a2b02/data/Transaction-Reporting.pdf>

Regulatory Market Making

<http://www.eurexchange.com/blob/3184808/c840272a4361a635b4c12138b63d1b46/data/er17102e---Attach-1.pdf>



www.eurexgroup.com

Installed Regulation – Achievements & Reminders (2/2)

PRIIPs

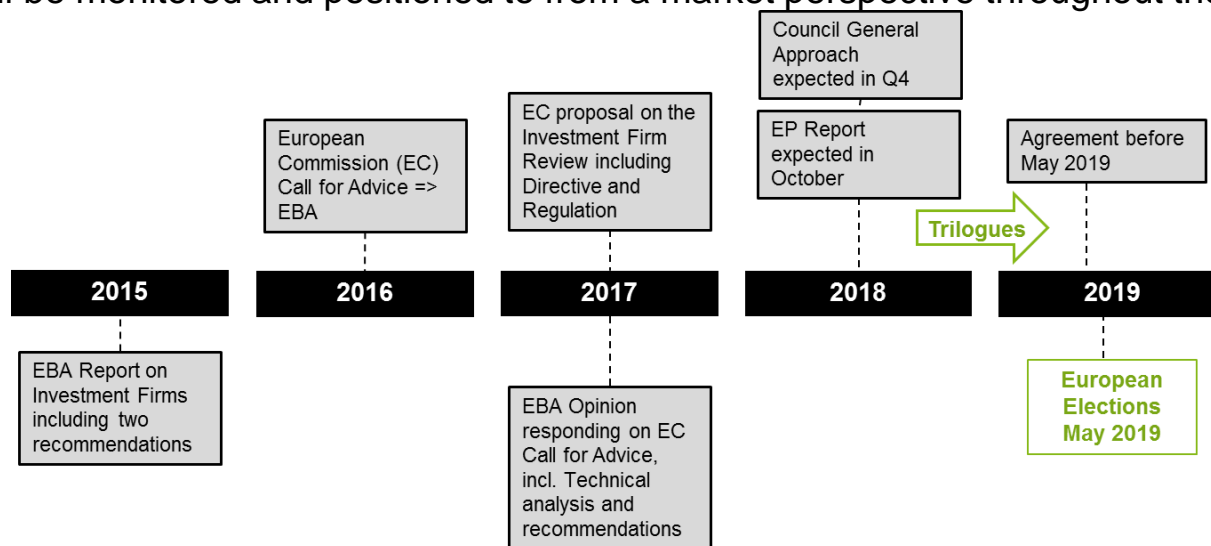
- For all Eurex products, Key Information Documents (KIDs) are available on the Eurex website and can be downloaded in bulk or individually
- These can be found under following link:
<http://www.eurexchange.com/exchange-en/resources/regulations/eu-regulations/priips-kids>
- The KIDs are available in 9 languages (German, English, French, Italian, Spanish, Dutch, Danish, Swedish, Czech) and Finnish will be added shortly

EU Benchmark Regulation

- In order to use benchmarks in the EEA, the new regulation demands that the administrators of such benchmarks used are registered with ESMA
- Currently, a transition period till 2020 is in place for administrators; however, administrators are already registering with ESMA
- Eurex is a user of benchmarks and can continue using benchmarks during the transition period

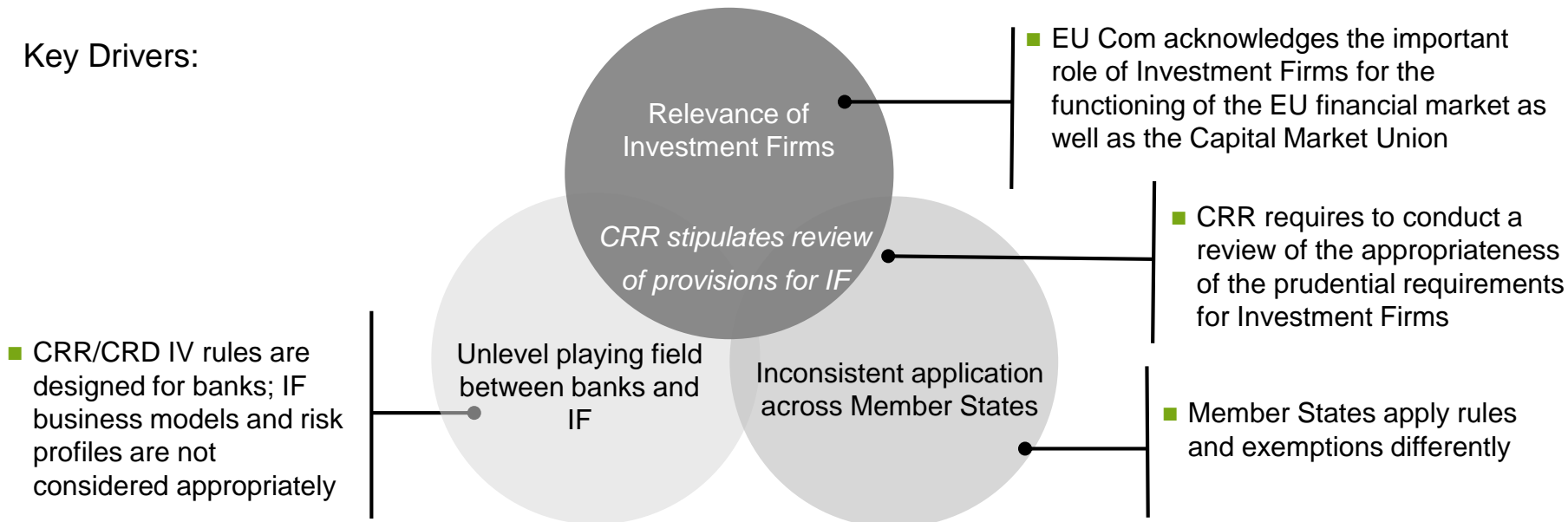
Current legislative proposal – Investment Firm Review (IFR) and capital requirements legislation (1/2)

- Currently, a legislative process is planned, for a new regulation, the IFR, to establish a new framework under the principles of proportionality
- Eurex has been approached by various market makers and clearing members, on the IFR dossier, and is following closely the regulatory discussions
- The framework that EBA reported to the EU Commission seems reasonable, the underpinning details though pose concerns for proprietary trading firms and clearing members alike
- The topic will be monitored and positioned to from a market perspective throughout the legislative timeline:



Current legislative proposal – Investment Firm Review (IFR) and capital requirements legislation (2/2)

Key Drivers:



EU legislators want to

- ensure that key prudential requirements for IF are adapted to their risk profile and business model, without compromising financial stability.
- differentiate prudential requirements according to the size, nature and complexity of investment firms.



T7 Release 6.1 & 7.0

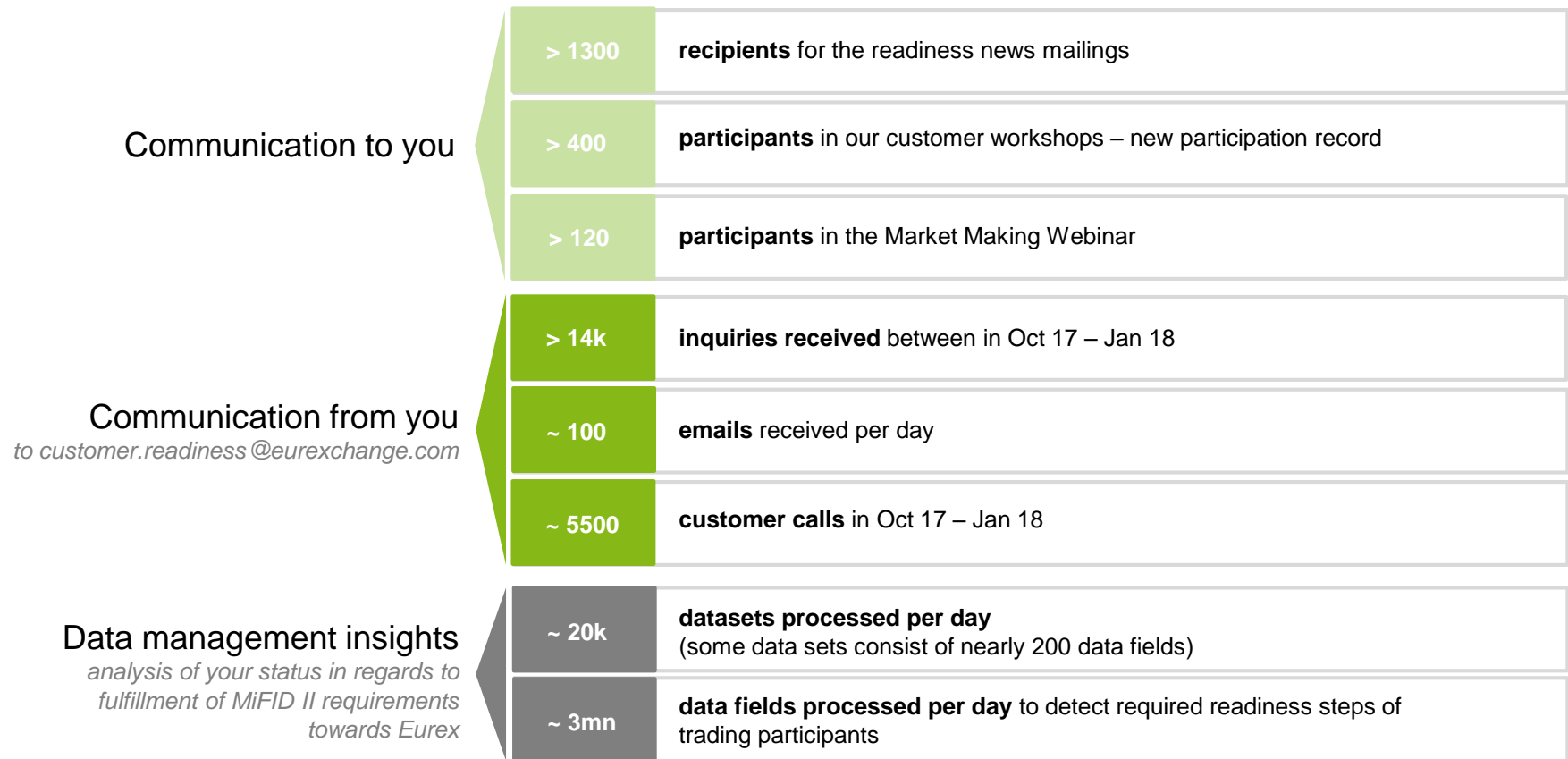
High-level introduction

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

MiFID II introduction – Some facts and figures



Meet the team – Your contact persons

KAM Trading Continental Europe

- Grimanesa Bordon (Team lead)
- Natacha Alliaume
- Tim Eisenbeis
- Festim Haziri
- Gwennaëlle Massin
- Olga May
- Fiona Mehler
- Fabian Pawelke

KAM Trading UK

- Grant Jenkins (Team lead)
- Luis Felipe Morales Fernandez
- Kinga Knapinska
- Tom Martin
- Simone Portelli
- Martin Christopher Rathbone

KAM Trading US

- Dominic Cole (Team lead)
- Debra Haywood
- Anna Lee

Market Readiness Projects

(ISVs, Service Provider, TPIPs)

- Olga Larin (Service Provider)
- Steven Will (ISVs & TPIPs)

To contact your Key Account Manager, please send an e-mail to:

name.surname@eurexgroup.com

Improved communication concept based on initiatives - For every major initiative & for your convenience

Readiness Mailings

to always keep you up to date and inform you about required tasks and updates



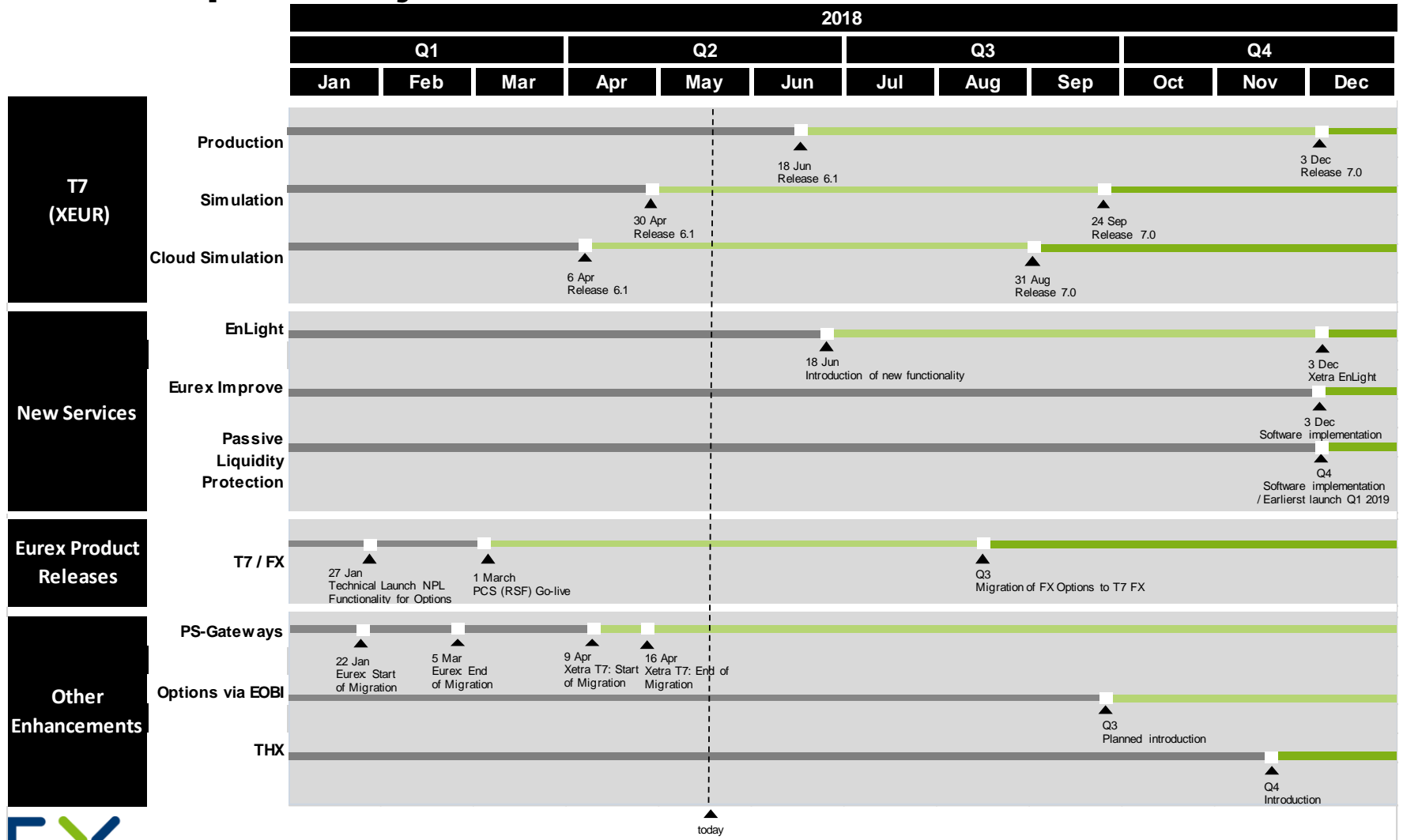
Consolidated subsites

Everything you need to know (manuals, references, circulars etc)
Go to eurexchange.com > Resources > Initiatives



How do you like it?
Do you have any suggestions for further improvement?
Please tell us: customer.readiness@eurexchange.com

Roadmap of Projects and Products



www.eurexgroup.com



Agenda

- Facts & Figures of MiFID II introduction
- Roadmap of Projects and Products 2018
- T7 Release 6.1
 - Eurex EnLight Enhancements
 - Book-or-Cancel (BOC) possibility for quotes
 - T7 ETI, FIX & RDI enhancements
 - Additional functional enhancements
- T7 Release 7.0
 - Eurex EnLight Enhancements
 - Eurex Improve
 - Trading Hours Extension
 - Risk Functionality Enhancements
 - Passive Liquidity Protection
 - Recommendations for a successful migration

What is T7 Release 6.1 & 7.0?

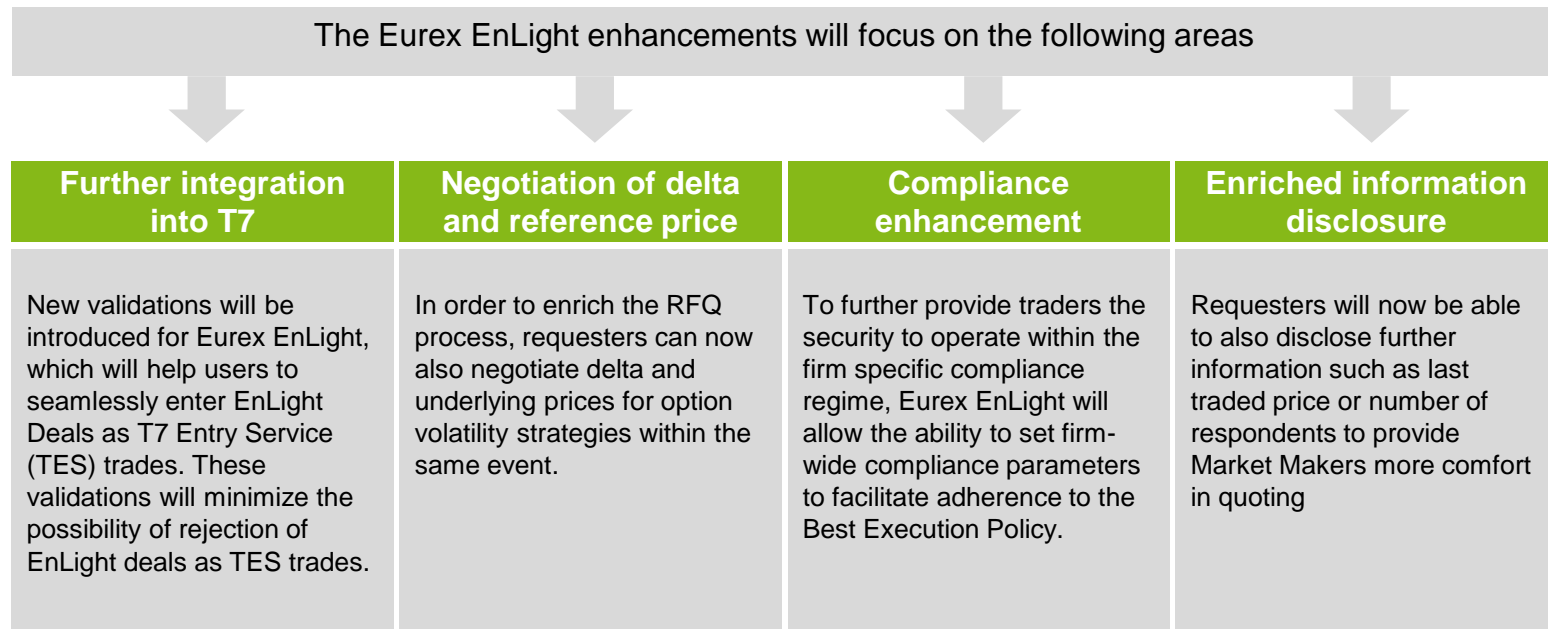
This presentation provides information updates about the development of T7 Release 6.1 and T7 Release 7.0 in order to support adequate planning and to ensure a successful introduction for trading participants and intermediaries (ISVs, Service Providers, TPIPs).

The release will affect the Eurex, Cash and FX markets.

	T7 6.1	T7 7.0
T7 Cloud Simulation	6 April 2018	31 August 2018
Release Simulation	30 April 2018	24 September 2018
Production	18 June 2018	3 December 2018
Backwards compatibility for trading interfaces	yes	tba
Backwards compatibility for market and reference data interfaces	no	no

T7 6.1: Eurex EnLight

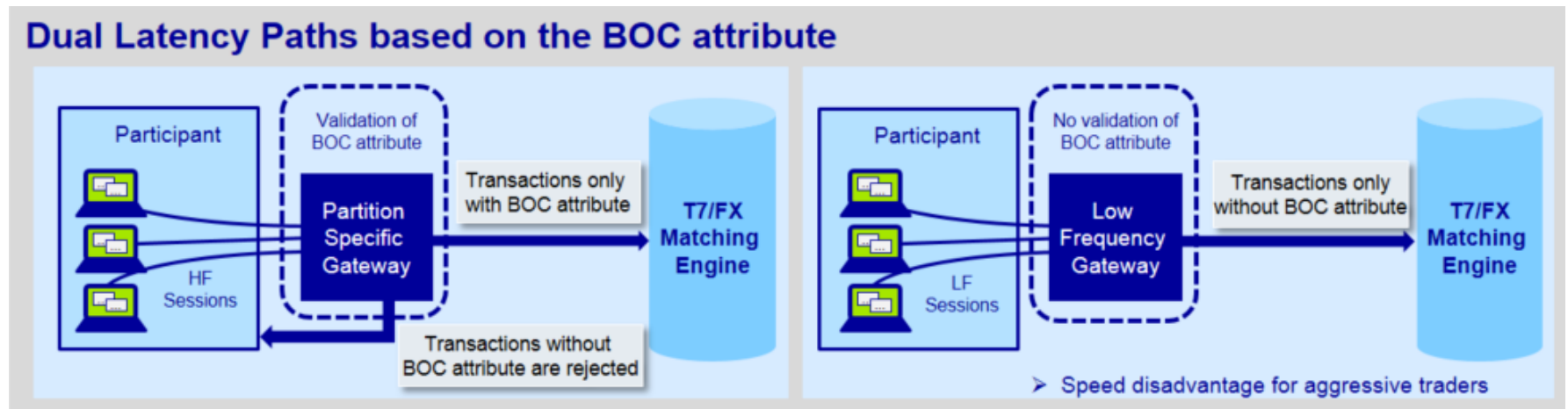
T7 Release 6.1 includes enhancements to Eurex EnLight, the Selective RFQ Service introduced with T7 Release 6.0.



Further reading: <http://www.eurexexchange.com/exchange-en/resources/initiatives/eurex-enlight>

T7 6.1: Book-or-Cancel for Quotes – only Eurex T7 / FX

- With the introduction of T7 Release 6.1, it will be possible to use the BOC attribute for quotes (BOC is already available for orders).
- The **BOC attribute is mandatory** for the Partition Specific Gateway in T7 FX and optional in Eurex T7, other transactions without the BOC restriction are rejected.
- In case of **mass quote** or **quote activation** request, where the BOC attribute is specified; each quote side contained in a mass quote request or activated by an activation request, contains the BOC attribute.
- For **Designated Sponsor** or **Market Maker** quotes when the BOC restriction is used, each individual quote side will be checked whether they can be partially or fully executed upon entry.
- Quotes with BOC attribute will be cancelled if they can be executed immediately upon **entry**; in case a quote side is cancelled because of a BOC attribute, then the opposite quote side is also cancelled.
- Along with the **deletion**, participants will receive response messages per deleted quote with a dedicated reason.
- The BOC restriction applies only in the instrument state 'continuous'.



T7 6.1: Enhancements of the trading & refdat interface

ETI

- **HF sessions will be extended to support standard orders** that are currently only available via low frequency (LF) sessions for regular trading. ETI high frequency (HF) sessions currently allow lean orders and quotes whereby only the executions and foreign events may be recovered.
- **Short order message layouts will be extended to support standard orders**, therefore a new field *AppSeqIndicator (28703)* will be added to identify whether an order is lean or a standard order. Given that standard orders can be either persistent or non-persistent, new valid values for the attribute *ExecInst (18)* will also be introduced. ETI short order message layouts (New Order Single (Short Layout), Replace Order Single (Short Layout)) are currently supported for simple instruments and lean orders only. Thereby, lean orders are always non-persistent.
- **Support new short order message layouts for complex instruments** referred to as "New Order Multi Leg (Short Layout)" / "Replace Order Multi Leg (Short Layout)". The new short order message layouts will consider lean and standard orders and respectively the possibility to choose whether persistent or non-persistent.

Further reading: <http://www.eurexchange.com/exchange-en/resources/initiatives/t7release61>

FIX

- **FIX back office sessions will deliver the information for TES trades via the FIX Trade Capture Report** to consolidate all trades in one channel.
- **Identifier which input-interface submitted an order**, a new FIX message will be introduced via the T7 FIX back office sessions.
 - This new FIX message will contain the list of all sessions-IDs of the business unit with their attributes.
 - Based on this data and on the session-IDs provided in each order and trade message send via the corresponding T7 FIX Back office session, participants will be able to map each message to the corresponding input-interface.

RDI / RDF

- **The security description will be extended to include the instrument mnemonic for simple instruments too**, as currently applied for complex and flexible instruments.
- To be more FIX compliant, the values for the *SecurityType (167)* will be aligned across all RDI messages, i.e. in the Product Snapshot, Instrument Snapshot and in the Security Status.



Please note that the Reference Data Interfaces (RDI & RDF) do *not* provide backward compatibility

T7 6.1: Additional functional enhancements

Maximum Order Value

With the production launch, the Maximum Order Value will be denoted as an integer instead of the current eight decimal places after the value, i.e.:

- old: 3,12345678 €
- new: 3 €

Liquidity Indicator in Auctions

A new valid value 4 ("Auction") will be introduced for the tag *FillLiquidityInd* in the *Book Order Execution* report in case of executions in Auctions/ Uncrossing trades. This tag will be synchronized with the tag *SideLiquidityInd* in the Trade Notifications.

Stop Button Legal Text Messages

With the release introduction, the individual STOP button legal text messages will provide the member ID for which the stop button was activated. The enhancement will provide traders trading for more than one member ID (i.e. multiple clearing relationships) with additional information. Additionally, the messages will be sent to the clearing member as well.

Trades resulting from Quotes

Currently, for trades resulting from quotes (*ETI/ FIX: OrderCategory (1115) = 2 (Quote)*), no exchange order ID (*ETI/ FIX: OrderID (37)*) nor system order version number (*ETI/ FIX: OrderIdSfx (25108)*) are delivered within the trade messages. With the release introduction, this behavior will change and the mentioned tags will be populated in the ETI Trade Notifications, FIX Trade Capture reports, and in the participants' reports (exchangeOrderId, versionNo).

TVTIC Enhancements

Currently, the TVTIC is provided as an end-of-day information in the Report TE810 in the field TVTIC and as a real-time information via CEF ® Core in the field TRANS_ID_CODE (846F). The enhancement introduces a modified creation rule by adding the MatchStep ID at the end of the current TVTIC. From these dates onwards, the TVTIC has to be concatenated by the following fields:

TVTIC = Envir_Flag (1) + T7 SecurityID (20) + TranTime(20) + DealType(1) + MatchStepID(10)

Further reading: <http://www.eurexchange.com/exchange-en/resources/initiatives/t7release61>

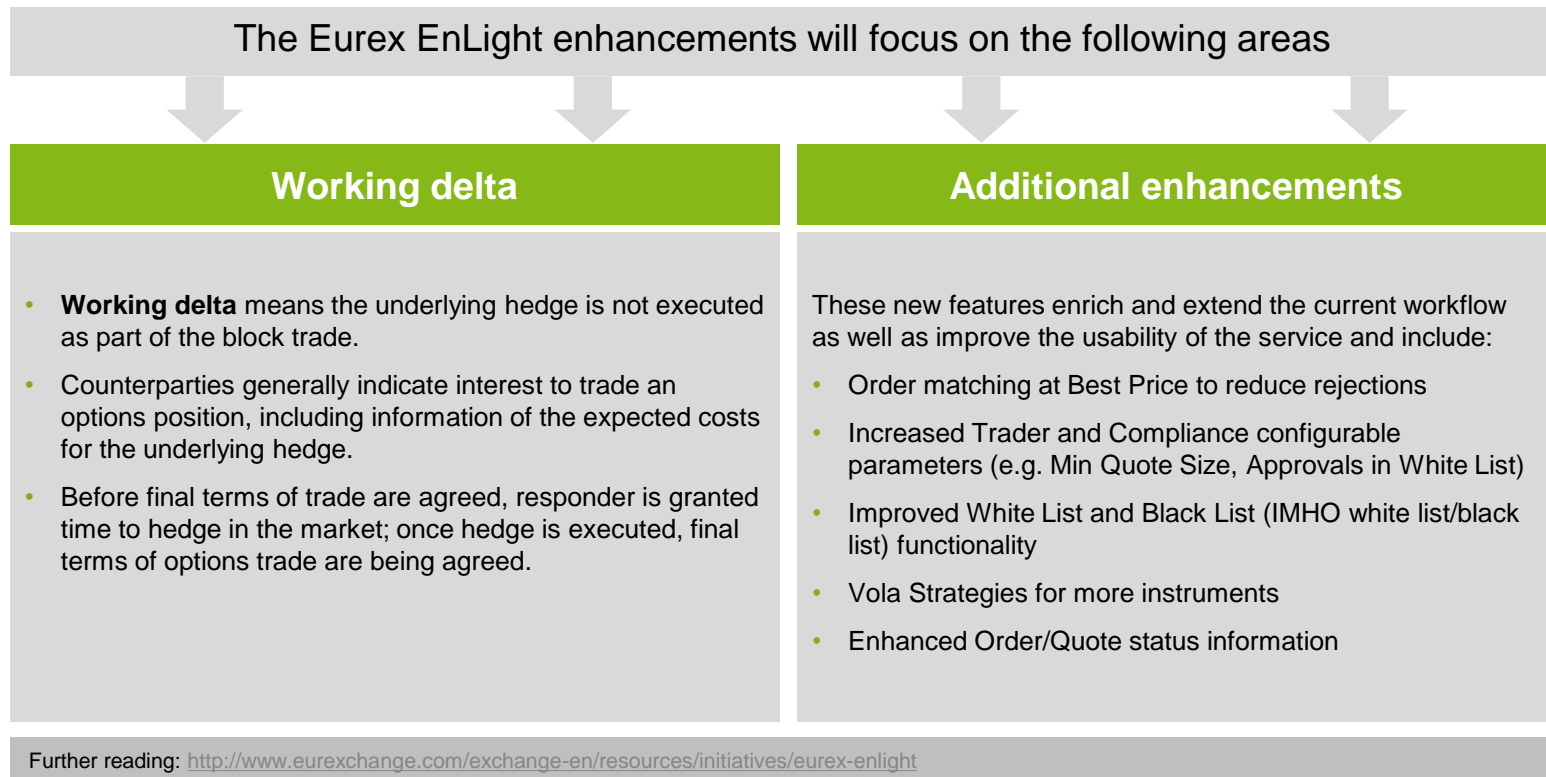


Agenda

- Facts & Figures of MiFID II introduction
- Roadmap of Projects and Products 2018
- T7 Release 6.1
 - Eurex EnLight Enhancements
 - Book-or-Cancel (BOC) possibility for quotes
 - T7 ETI, FIX & RDI enhancements
 - Additional functional enhancements
- T7 Release 7.0
 - Eurex EnLight Enhancements
 - Eurex Improve
 - Trading Hours Extension
 - Risk Functionality Enhancements
 - Passive Liquidity Protection
 - Recommendations for a successful migration

T7 7.0: Eurex EnLight

T7 Release 7.0 includes further enhancements to Eurex EnLight, the Selective RFQ Service introduced with T7 Release 6.0 and 6.1. With T7 Release 7.0 end of 2018 EnLight will also be introduced for the Cash Market.



T7 7.0: Eurex Improve (1/2)

Creates fair participation model for client flow facilitation

What is it?

- Eurex Improve is an new service provided by Eurex for trading participants trying to facilitate customer flow.
- Client flow facilitation services with full integration into the central order book.

Why is it great?

- Focus on client obtaining agreed price or better
- Functionality balances different interests of brokers and market makers
- Fully automated solution integrated into the Eurex central order book
- Complete audit trail and fulfilment of best execution requirements

benefits for

End customers

Customer order is executed in the central order book; it is verified whether the customer order can be executed at a more favorable price than initially agreed by broker.

Liquidity providers

Eurex Improve engages liquidity providers with order-flow which otherwise may have been executed without their participation.

When an “Improve Request” has been announced, a “Eurex Improve” match event with participation of the customer order will occur after a known period of time (“price improvement period”, lasting between 0.1 and 1 second).

Brokers

Broker can rely on the execution of the customer order at price agreed with him. Provided that the agreed price is competitive, the broker will be completely executed against the customer order. Depending on the market development during the price improvement period, it is also possible that the broker is partially or not at all executed against the customer order.

Furthermore, broker can provide customer with exchange transaction rather than bilateral transaction, thereby automatically addressing best execution and transparency needs.

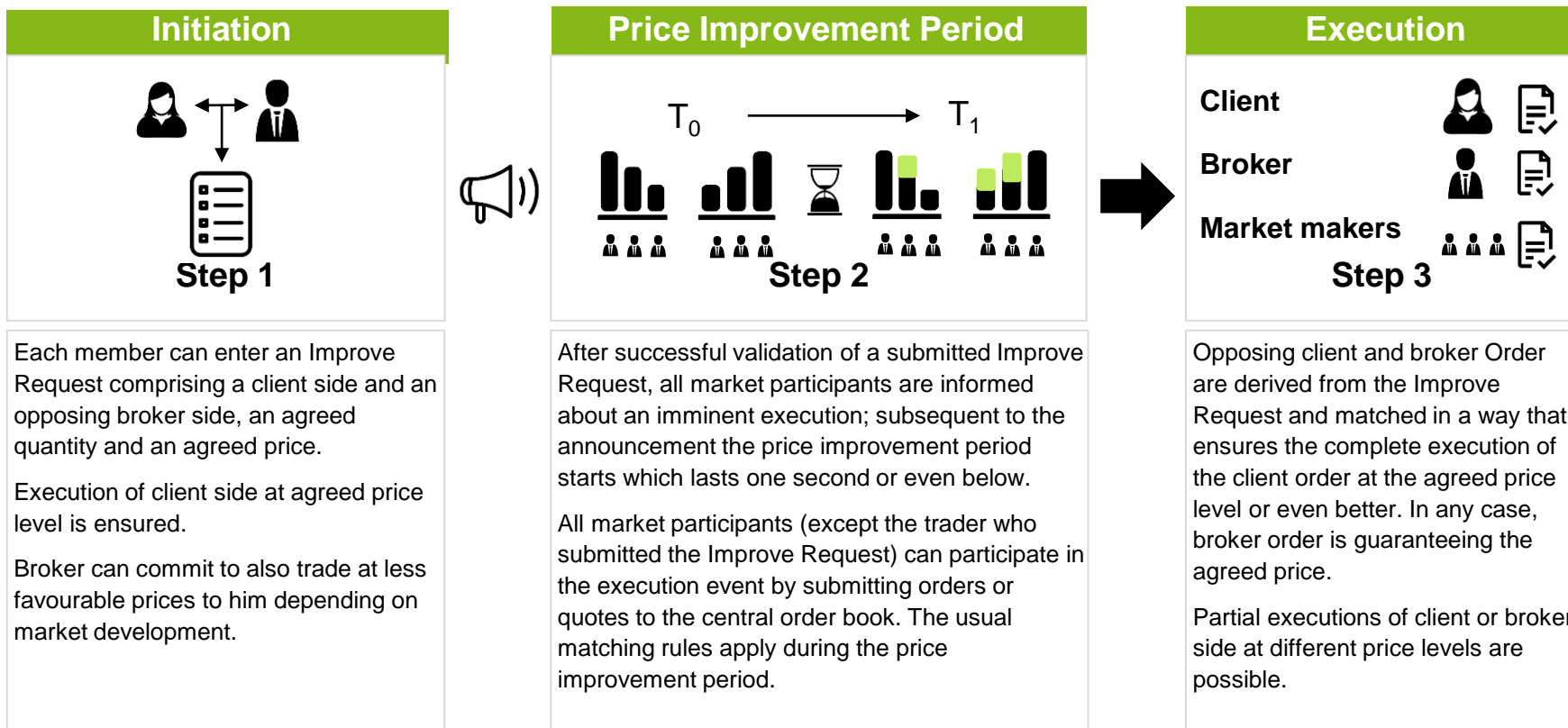


www.eurexgroup.com

T7 7.0: Eurex Improve (2/2)

Introduces cutting-edge client flow facilitation mechanism

Eurex Improve can be regarded as a 3 step process which finally creates a specific matching event in the central order book.



T7 7.0: Trading Hours Extention (THX)

Market opening

Starting from 10th December 2018, **market opening** for selected benchmark futures and MSCI Futures at Eurex will be moved forward to 08.00am Singapore/Hong Kong time (01.00am CET/02.00am CEST when there is daylight savings time in Germany), starting with a Pre-Trading phase and an Opening Auction of 15 minutes in total. Continuous trading will start at 08.15am Singapore time.

Morning hours

Depending on market feedback, for some products an **additional intraday auction** may be implemented in the European morning hours. The end of the trading day for benchmark futures at 10.00pm CET will remain unchanged.

Available features

All existing T7 functionalities, including all safeguards and plausibility checks, will be **available** during the extended trading hours. This also includes the T7 Trade Entry Services (TES).

Access

All trading members will **automatically have access** to the extended trading hours without the need to sign additional admission documents. However, systems routines need to be amended if client wants to participate.

Order processing

Trading members should keep in mind that **Good-till-Date orders and Good-till-Cancelled** orders will be active and may be executed during the extended trading hours. Therefore orders need to be removed from the order book if a trading participant does not want to participate during the extended trading hours.

T7 7.0: Risk Functionality Enhancements

For existing and new functional risk parameters

Motivation & benefits

- Eurex received feedback from multiple members to introduce specific functionality targeted at **risk reduction** for their algorithmic trading strategies and market making activities. Orders and Quotes are also considered with this functionality.
- The focus was to improve possibilities for NCMs to control order book and trade positions, with a focus on very granular timescales.
- The proposed enhancements and new functionality intend to serve a broad range of different customer groups by covering both order book, but also TES and will be **relevant NCMs and GCMs**.

Functionality

- **ENHANCED:** Mass Quote cancel on Business Unit or Session and Product level.
- **ENHANCED:** Market Maker Protection for Quotes, on Business Unit level and/or on Session Level.
 - Allow cancellation of quotes and market maker protection on the Business Unit level, where all quotes of all connected trading sessions would be considered. A member can choose whether to cancel mass quotes on trading session or Business Unit level. A member can use market maker protection both on Business Unit and session level.
- **NEW:** Pre-trade risk limits (Exposure Limits per product) - can be set by exchange, Clearing Member, or Business Units, to be kept in the T7 Matching Engine and TES in real-time for NCM and GCM.
 - Business Units can define several pre-trade risk limits and can individually assign them to user risk groups. Each user can be assigned to one user risk group and there can be several risk groups.
 - Upon order and quote entry or TES trading, the defined limits are checked and if they are exceeded, the transaction is rejected.
 - Open orders and quotes of a Business Unit user risk group in a certain product, as well as the net positions of Business Unit user risk group are accumulated on that given day.

Interface impact

- Trading Interfaces (ETI and FIX-GW)
- GUIs
- Reports



T7 7.0: Passive Liquidity Protection

Launch earliest Q1 2019 (software implementation with T7 7.0 in December 2018)

Motivation & benefits

- The solution enables liquidity providers to **consider new information** in the order book before aggressive liquidity taker are able to interact with the order book.
- Eurex strengthens passive liquidity providers competing against aggressively trading liquidity takers by allowing passive liquidity flow to directly interact with the order book and deferring aggressive liquidity flow.
- As a result, an **increase of visible liquidity (tighter quote spreads, higher quote quantities) and more trading** in the order book is assumed,
- Please note that the concept of Passive Liquidity Protection can be **activated for selected products** after the introduction of T7 Release 7.0. The concept, the product scope and the activation time of the PLP functionality continues to be in discussion with market participants.

Functionality

- Discrimination of passive versus aggressive liquidity flow is determined by T7 (matching engine); each incoming and executable (i.e. marketable) transaction in products supporting PLP is defined to be aggressive and will be deferred; quotes are assumed to be passive by definition, i.e. a quote side which turns out to be aggressive is deleted.
- **Aggressive order transactions** (i.e. order transactions which are executable upon entry) will be deferred by a time interval in the order of milliseconds before they are able to impact the order book.
- **Non-aggressive order transactions** (i.e. order transactions not executable upon entry) are directly updating the order book without deferral.

Interface impact

Change of transaction processing flow:

- Trading Interfaces (ETI and FIX-GW)
- Market Data (MDI) and Reference Data Interfaces (RDI)
- GUIs
- Reports



Recommendations for a successful migration

Channel	To-Do
Readiness Mailings	Follow the recommendations published by Eurex. If you want to subscribe, please send an email to customer.readiness@eurexchange.com
Release Notes	Verify which of the items are affecting your business and need to be put in focus.
Simulation Guide	Follow the recommendations of testing and participate in the prepared simulation scenarios.
T7 Cloud Simulation & T7 Release Simulation	Participate actively in the simulation, check that all processes and trading tools (Eurex GUIs, proprietary software, ISV software, used algorithms) etc are compliant and working with the new release version.
Readiness Statement	Send us the signed readiness statement in due time. Many thanks! http://www.eurexchange.com/exchange-en/technology/t7/system-documentation/release61/Release-61/3252006?frag=3252024



Contact

Group Client Key Account Management Trading

Deutsche Börse AG
Mergenthalerallee 61
65760 Eschborn

Your individual key account manager directly or
customer.readiness@deutsche-boerse.com

Appendix



Back-up: Publications schedule – T7 Release 6.1

T7 Release 6.1	Eurex	Xetra	Combined	Q4 2017			Q1 2018			Q2 2018			Q3 2018	
				Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Release Notes														
T7 Release 6.1, Release Notes	X	X					◆				●			
Simulation														
Participant Simulation Guide	X	X								●				
Overview and Functionality														
T7 Functional and Interface Overview			X							●				
T7 Cross System Traceability			X							●				
T7 Functional Reference			X							●				
Participant and User Maintenance Manual	X	X								●				
Contract Notes Description		X								●				
GUI Solutions														
T7 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	X							◆	■	●			
T7 Enhanced Trading Interface – XML Representation	X	X							◆	■	●			
T7 FIX Gateway - FIX 4.2 and 4.4 Manual incl. Fiximate and Repository			X						◆	■	●			
Market and Reference Data Interfaces														
T7 Market-, Enhanced Order Book- and Reference Data Interfaces, Manual incl. Fast Message Template and Repository			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							●				

- ◆ - cloud-simulation / preliminary version
- - simulation / preliminary version
- - production / final version

Back-up: Publications schedule – T7 Release 7.0

T7 Release 7.0	Eurex	Xetra	Combined	Q1 2018			Q2 2018			Q3 2018			Oct	
				Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
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 files			X										◆	■
T7 Enhanced Trading Interface – XML Representation			X										◆	■
T7 FIX Gateway - FIX 4.2 and 4.4 Manual incl. Fiximate and Repository			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

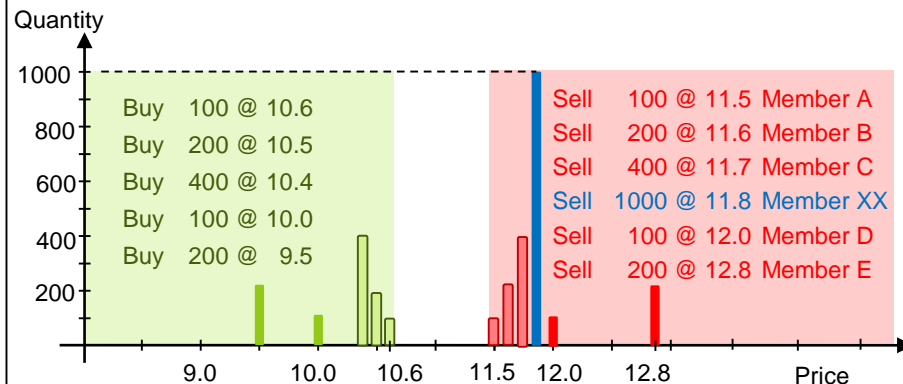
Example 1: Eurex Improve match without tolerable price

Initiation - Order book at T_0



- Member XX enters Improve Request, containing:
 - Client: Buy 1000 @ 11.8; and
 - Broker: Sell 1000 @ 11.8.
- Client is guaranteed full execution at 11.8 or better.
- Bid ask spread at T_0 is 10.0 – 12.0 for 100 lots.

Price Improvement Period - Order book at T_1



- All market participants are informed of imminent Improve execution, and can provide additional quotes.
- Members A, B and C enter additional quotes to order book.
- Improved bid ask spread at T_1 is 10.6 – 11.5 for 100 lots.

Execution

- Improve Request is converted into client order and broker order.
- Client order is executed against order book (of T_1).
- Client order is partially executed against A, B, C and XX.
- Average client buy price is 11.69 for 1000 lots.
- Member XX sold 300 lots at average price of 11.8.

Execution	Counterpart
100 @ 11.5	Member A
200 @ 11.6	Member B
400 @ 11.7	Member C
300 @ 11.8	Member XX

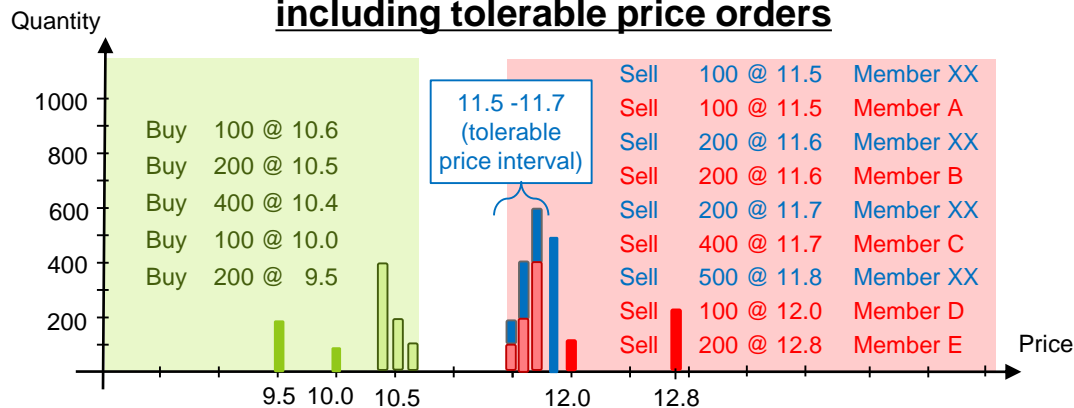


Example 2: Eurex Improve match including tolerable price with 50 % tolerable quantity share

Initiation – Order book at T₀

- Same as in previous example, i.e. Improve Request, containing:
 - Client: Buy 1000 @ 11.8; and
 - Broker: Sell 1000 @ 11.8.
- Member XX enhances Improve Request by including **maximum tolerable price of 11.5** (committing to also trade at less favourable prices depending on market development).
- Bid ask spread at T₀ is 10.0 – 12.0 for quantity 100.

Price Improvement Period - Order book at T₁ including tolerable price orders



- Same as in previous example, however including automatically generated broker orders for member XX with tolerable prices 11.7, 11.6 and 11.5.
- The quantity of the tolerable orders of member XX are determined to receive a 50 % share of the matched client quantity on tolerable price levels; remaining 50 % of matched client quantity is allocated to orders / quotes entered during price improvement period.
- All orders of member XX have time stamp T₀ to preserve time priority.

Tolerable order concept

- During execution, tolerable broker orders are automatically created for price levels between maximum tolerable price and agreed price provided orders/quotes from market participants were entered during price improvement period for those price levels.

Execution

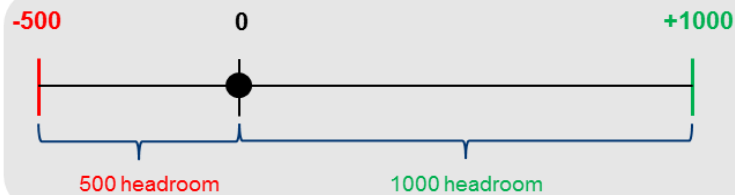
- Same as in previous example.
- Client order is partially executed against members A, B, C and XX.
- Average client buy price is 11.62 for 1000 lots.
- Member XX sold 500 lots (i.e. 50% of originally agreed client quantity) at average price of 11.62.

Execution	Counterpart
100 @ 11.5	Member XX
100 @ 11.5	Member A
200 @ 11.6	Member XX
200 @ 11.6	Member B
200 @ 11.7	Member XX
200 @ 11.7	Member C



Risk Functionality Enhancements – Scope T7 Release 7.0

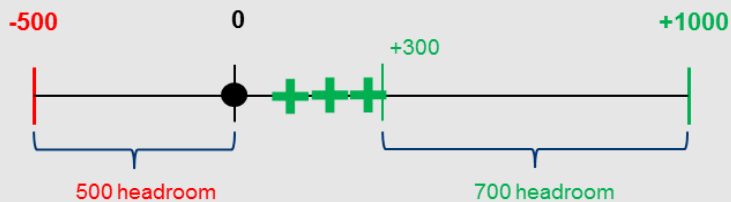
Pre-Trade Risk solution methodology for order book and TES are independent but effectively prevent violation



1

At start of day, the NCM has a limit of **+1000** contracts intraday, and **-500** contracts intraday. Its starting Net position (black dot) is 0. The member can never breach the boundaries set at **+1000** and **-500**.

For orderbook and TES separate limits are used and there is no dependency between the limits or the calculation.



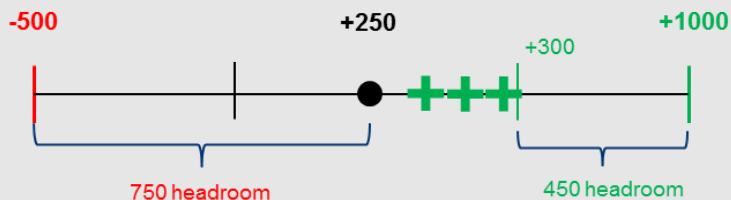
2

For Orderbook:

If an NCM enters Limit orders, in this case 3 orders of **+100** BUY quantity, the 'headroom' towards that side will reduce (to **+700** in this case)

For TES:

If an NCM approves a TES trade that is not executed yet (e.g. counterparty still needs to approve), in this case **+300** BUY quantity, the 'headroom' towards that side will reduce (to **+700** in this case)



3

For Orderbook:

If now the NCM sends another BUY order, this time of **+250** lots that Trades in the order book, the BUY headroom further reduces (by 250), while the SELL headroom increases (by 250).

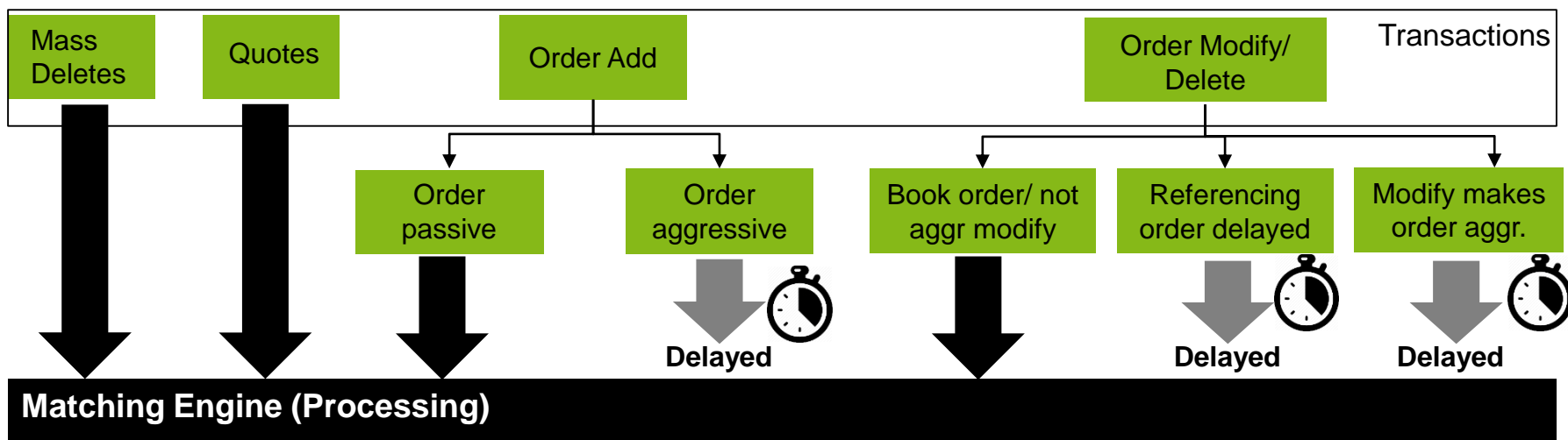
For TES:

If now the NCM sends another BUY TES approval request, this time of **+250** lots that is resulting in immediate execution (as the counterparty has already approved), the BUY headroom further reduces (by 250), while the SELL headroom increases (by 250). A TES entry that the NCM has not approved yet is not blocking any quantity as the validation is only done with the approval request of the NCM, only then blocking via an executed TES trade or an one sided not executed but approved TES trade

Passive Liquidity Protection – Scope T7 Release 7.0

Description of the Model

- Each incoming transaction is either defined to be passive by nature (quotes, mass cancel) or checked on its passiveness at arrival based on the order book situation. All passive transactions are immediately processed, while aggressive transactions are delayed.
- Quotes are always passive, such that every quote side that might aggress is deleted automatically.
- Whether an order is aggressive is decided by the matching engine based on the order book and only delayed if the order would aggress. Referencing transactions (modify / delete of an aggressing and delayed order) on a delayed transaction are not lost, but also delayed
- Mass order deletes will consider all relevant orders in the book, while all transactions in the queue (deferred) will not be immediately deleted but interact with the order book (after deferral time is over) first, then the deletion will be processed



Eurex Reports Changes – Scope T7 Release 6.1 (1/2)

Changes in existing reports

<p>1</p> <p>TC810 – Daily Trade Confirmation</p>	<p>For trades resulting from quotes, the tags exchangeOrderId and the versionNo will be delivered.</p>
<p>2</p> <p>TE600 – T7 Trading Reports Reference Manual (prior Selective RFQ Service Maintenance)</p>	<p>The report TE600 will be enhanced to enrich the Best Execution reporting in Eurex EnLight and the additional functionality.</p>
<p>3</p> <p>TE610 – Eurex EnLight Best Execution Summary (prior Selective RFQ Service Best Execution Summary)</p>	<p>The report TE610 will be enhanced to enrich the Best Execution reporting in Eurex EnLight.</p>
<p>4</p> <p>TE545 - Daily TES Maintenance</p>	<p>The report TE545 will be enhanced with the <i>SRQSNegotiationEventID</i> and <i>SRQSDDealID</i> to incorporate the change in EnLight fields in TES trades.</p>

Eurex Reports Changes – Scope T7 Release 6.1 (2/2)

Changes in existing reports

5	TR160 – Identifier Mapping Error	The report TR160 will be enhanced with detailed error information (available in simulation from 15 May 2018)
6	TR162 – Algo HFT Error	The report TR162 will be enhanced with detailed error information (available in simulation from 15 May 2018)
7	RD115 – User Profile Status	Two fields will be added into the rd115Rec1 group (prefSettlAcct and prefSettlLocat) reflecting the user settlement accounts and locations for all connected CCPs.
8	RD110 – User Profile Maintenance	Changes to the new fields described for RD115 will be reflected here as well.
9	TD930 – Daily Trade Statistics	Currently, both fields IstTrdPrc and IstValPrc contain the last traded price. With release introduction, the IstTrdPrc will be removed and the field IstValPrc will be renamed to IstExchPrc.

Eurex Reports Changes – Scope T7 Release 7.0

Changes in existing reports

<p>1</p> <p>TE610 – Best Execution Reports</p>	<p>The report TE610 will be enhanced to enrich the Best Execution reporting in Eurex EnLight. Best Execution Report shall be enhanced to include a new field called 'Capture Reason' to capture the reason of responder's deal rejection.</p>
<p>2</p> <p>TE810 – Daily Trade Confirmation</p>	<p>New valid values for the trade type are introduced (Eurex Improve on-exchange trade) which are set for trades with the match (event) type set to Eurex Improve.</p>
<p>3</p> <p>TE910 – Daily Trade Activity</p>	<p>New valid values for the trade type are introduced (Eurex Improve on-exchange trade) which are set for trades with the match (event) type set to Eurex Improve.</p>
<p>4</p> <p>TT132 – Market Maker Protection</p>	<p>The report will be ammendet as follows:</p> <ul style="list-style-type: none"> - sessionID needs to be optional in the report. - Field 'Instrument Type' will be removed

Eurex Reports Changes – Scope T7 Release 7.0

Changes in existing reports

<p>1</p> <p>TE610 – Best Execution Reports</p>	<p>The report TE610 will be enhanced to enrich the Best Execution reporting in Eurex EnLight. Best Execution Report shall be enhanced to include a new field called 'Capture Reason' to capture the reason of responder's deal rejection.</p>
<p>2</p> <p>TE810 – Daily Trade Confirmation</p>	<p>New valid values for the trade type are introduced (Eurex Improve on-exchange trade) which are set for trades with the match (event) type set to Eurex Improve.</p>
<p>3</p> <p>TE910 – Daily Trade Activity</p>	<p>New valid values for the trade type are introduced (Eurex Improve on-exchange trade) which are set for trades with the match (event) type set to Eurex Improve.</p>
<p>4</p> <p>TT132 – Market Maker Protection</p>	<p>The report will be ammendet as follows:</p> <ul style="list-style-type: none"> - sessionID needs to be optional in the report. - Field 'Instrument Type' will be removed

New Eurex Reports – Scope T7 Release 7.0

New Reports

<p>1</p> <p>TT136 – Pre-trade Risk control</p>	<p>This report lists all risk limit breach during the day, i.e. the maintenance of the risk limits by GCM as well as NCM. Reports are split per Business Unit and sorted by per Product ,Time and PrcActivity.</p>
<p>2</p> <p>TE810 – Daily Trade Confirmation</p>	<p>New valid values for the trade type are introduced (Eurex Improve on-exchange trade) which are set for trades with the match (event) type set to Eurex Improve.</p>
<p>3</p> <p>TE910 – Daily Trade Activity</p>	<p>New valid values for the trade type are introduced (Eurex Improve on-exchange trade) which are set for trades with the match (event) type set to Eurex Improve.</p>
<p>4</p> <p>TE590 – Eurex Improve Trading Indications</p>	<p>New daily Member Report for Eurex Improve trading</p>

Eurex EnLight

Introduction of new functionality

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

The Best Execution challenge for off-book price formation of ETDs



Requirement to take all sufficient steps to achieve the best result for clients*



Take into account price, cost, speed, likelihood of execution, size, nature or any other considerations*



All communication 'intended' to lead to a trade needs to be collected, collated and synchronised**



Synchronised data must be retrievable in a timely manner, for use in proof of BestEx from clients for up to five years***



This creates huge challenges for current off-book business, which is mostly driven via **voice** and **chat**.

Eurex EnLight, an electronic, selective RFQ Platform, is our solution to help Members meet this challenge...



MiFID II Directive references: * Article 27 par1. ** Article 16/7 par2. *** Article 16/7 par9
www.eurexgroup.com

The cornerstones of Eurex EnLight

Target Market



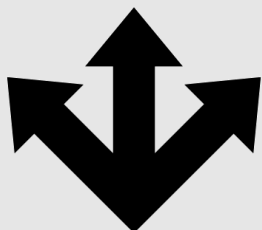
Off-book ETD business

Target Audience



Broker
and
Market Maker

Key Feature



Electronic Price
Discovery Platform with
STP to Exchange

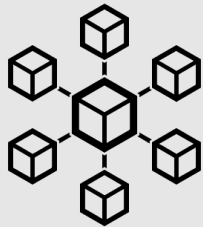
Launch Date



Launched in March 2018
with
Fixed Income Options

Minimal setup required to use the service

Technology



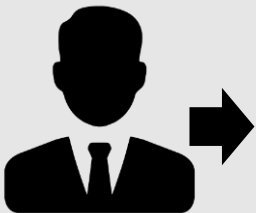
Built on Eurex T7
Infrastructure

Agreements



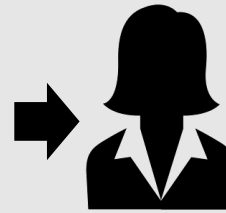
No separate
agreements needed, all
Eurex members can
use the service

For Requesters



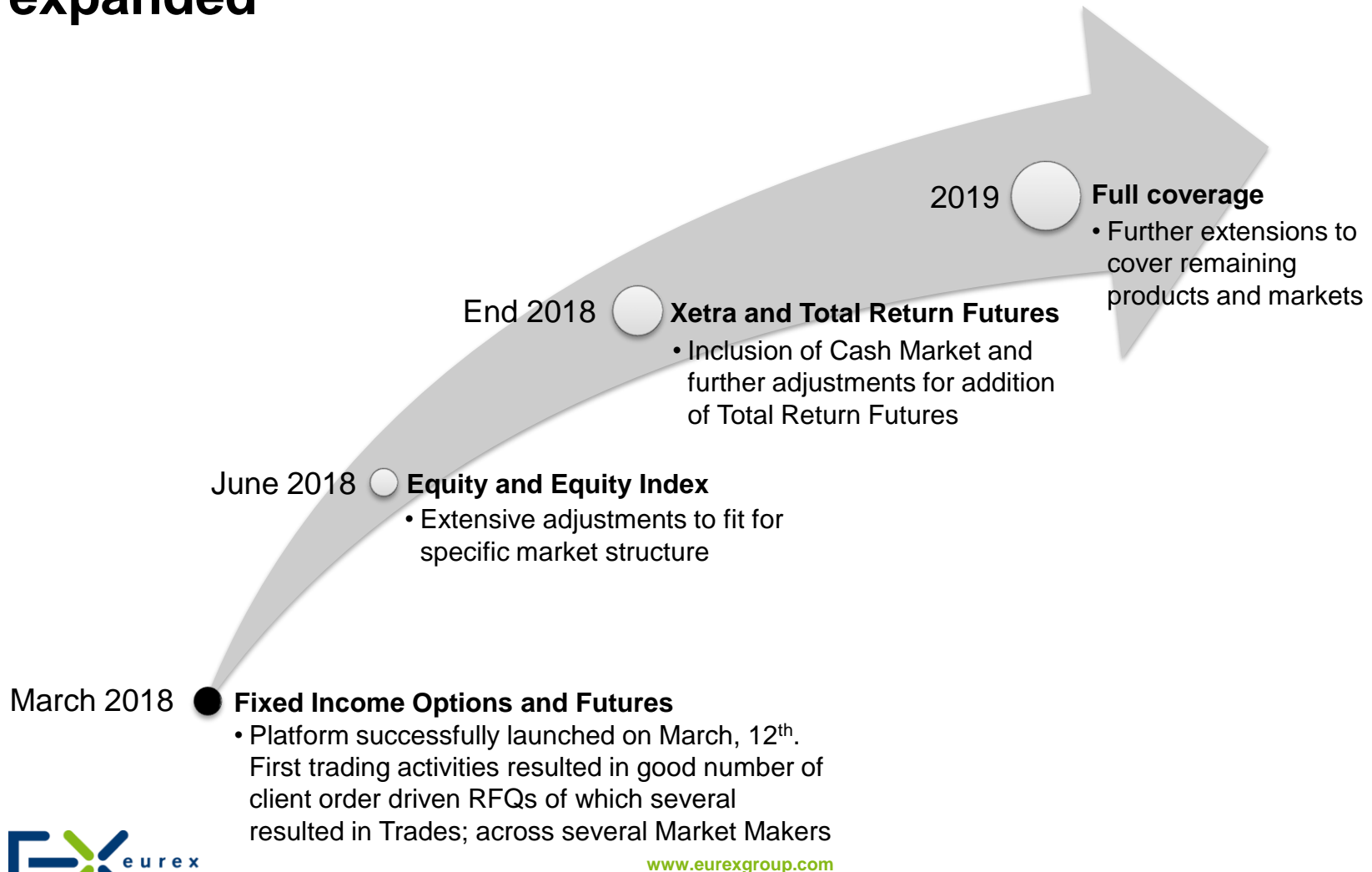
No special setup
required, service can
be accessed through
the Eurex T7 GUI

For Responders



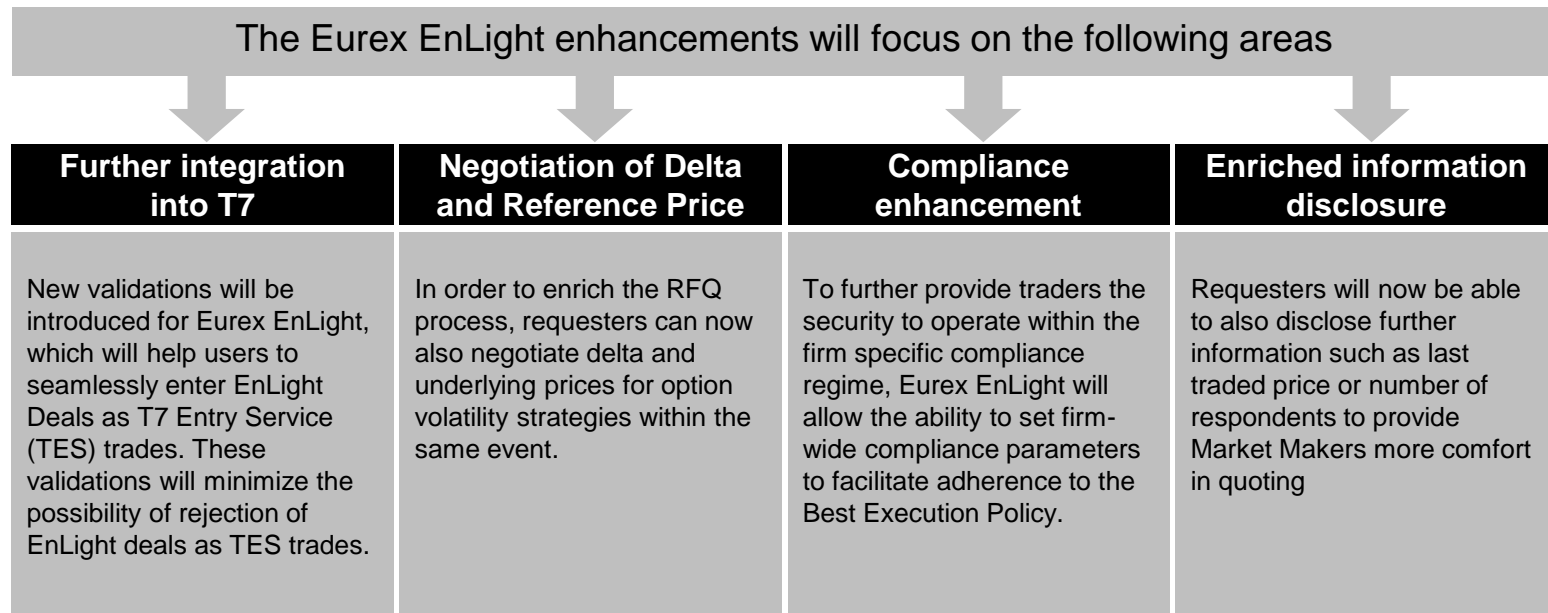
Contact Eurex to be set
up on default lists
recommended

Scope of products and markets will continuously be expanded



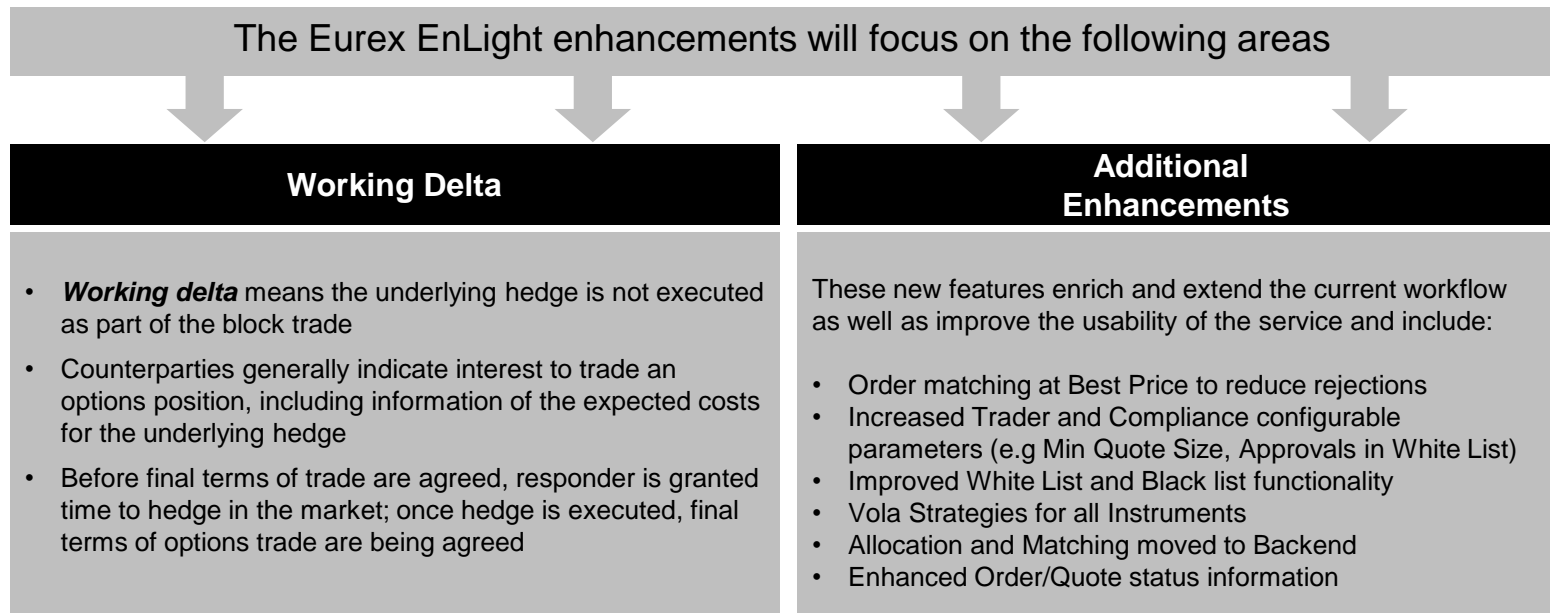
Eurex EnLight – Scope T7 Release 6.1

T7 Release 6.1 includes enhancements to Eurex EnLight, the Selective RFQ Service introduced with T7 Release 6.0.

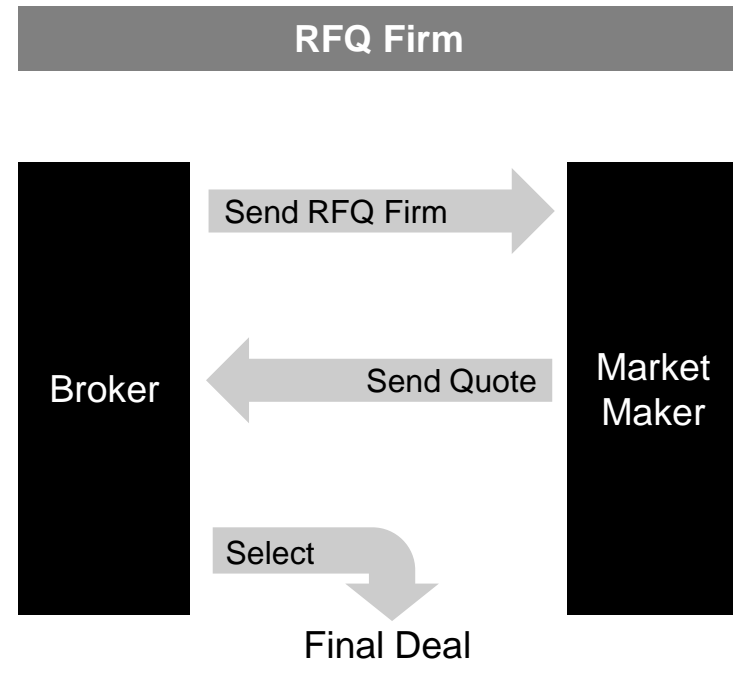
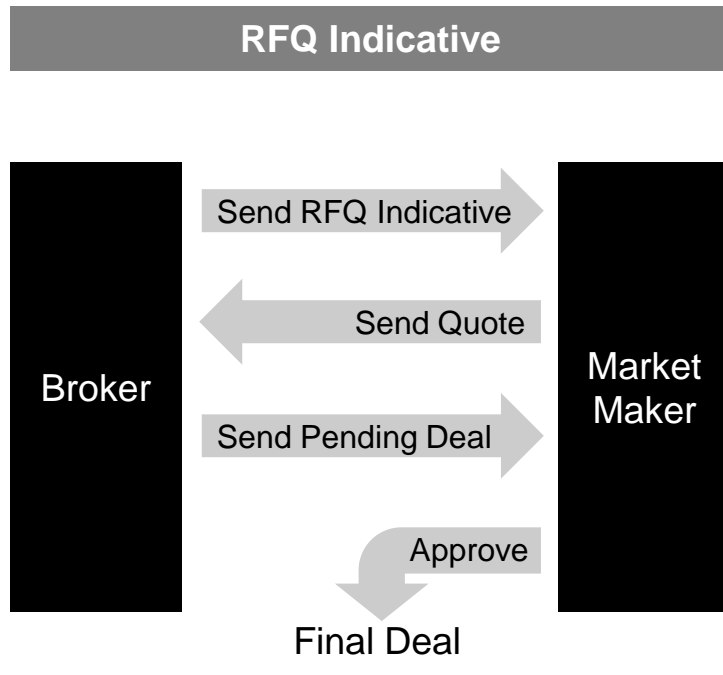


Eurex EnLight – Scope T7 Release 7.0

T7 Release 7.0 includes further enhancements to Eurex EnLight, the Selective RFQ Service introduced with T7 Release 6.0 and 6.1.



New negotiation workflows: RFQ Firm and RFQ Indicative



Functionality of Eurex EnLight at a glance (1/7)

Eurex EnLight Request Details - OPT ON BUND FUTURE

EnID: [] Strategy: BER-C+U Detected: Put Spread versus Short Call/Long Underlying Status: OPEN Requester: TRD0001 ReportID: []

BUL-U BUL BRT STD+U STD-P

	Leg 1	Leg 2	Leg 3	Underleg
BMW	OGBL	OGBL	OGBL	FGBL
OGBL	JAN14	JAN14	JAN14	DEC13
CONF	FEB14	FEB14	FEB14	MAR14
FDAX	MAR14	MAR14	MAR14	JUN14
ODAX	JUN14	JUN14	JUN14	
	9400	9400	9400	UnderPrc
	9450	9450	9450	RefOnly:
	9500		9500	NegotiateUL:
	9550		9550	ULDelta
	9600		9600	ULEffDelta
	9650		9650	
	9700		9700	

PUT PUT CALL

- 100 + - 100 + - 100 + - [] +

BUY SELL SELL BUY

Firm/Indic	Side	TotQty	OpenQty	DealQty	CLOB Bid	CLOB Ask	MaxTSL	LastDealPrc	LastDealQty	LastDealTime
Indic	B/S						10000			

BestBidQty	BestBid	BestAsk	BestAskQty	Show RespondentsCount		Add Favorites
				<input type="checkbox"/>		<input type="text"/>

BidQty	Bid	Ask	AskQty	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	PrefAsk	Quoted Ask Quantity					TRD0002 .(123123 - 123123)	

Submit End Session Duplicate Save Favorites Add Respondent Remove Respondent Add Deal Reset

Define favorites for strategies and products



Functionality of Eurex EnLight at a glance (2/7)

Eurex EnLight Request Details - OPT ON BUND FUTURE

EnID: [] Strategy: BER-C+U Detected: Put Spread versus Short Call/Long Underlying Status: OPEN Requester: TRD0001 ReportID: []

BUL-U BUL BRT STD+U STD-P

	Leg 1	Leg 2	Leg 3	Underleg
BMW	OGBL	OGBL	OGBL	FGBL
OGBL	JAN14	JAN14	JAN14	DEC13
CONF	FEB14	FEB14	FEB14	MAR14
FDAX	MAR14	MAR14	MAR14	JUN14
ODAX	JUN14	JUN14	JUN14	
	9400	9400	9400	UnderPrc
	9450	9450	9450	RefOnly:
	9500		9500	NegotiateUL:
	9550		9550	ULDelta
	9600		9600	ULEffDelta
	9650		9650	
	9700		9700	

PUT PUT CALL

- 100 + - 100 + - 100 + - [] +

BUY SELL SELL BUY

Firm/Indic	Side	TotQty	OpenQty	DealQty	CLOB Bid	CLOB Ask	MaxTSL	LastDealPrc	LastDealQty	LastDealTime
Indic	B/S						10000			

BestBidQty	BestBid	BestAsk	BestAskQty	Add Best Deal		Show RespondentsCount	Add Favorites

BidQty	Bid	Ask	AskQty	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	PrefAsk	Quoted Ask Quantity					TRD0002 .(123123 - 123123)	

Submit End Session Duplicate Save Favorites Add Respondent Remove Respondent Add Deal Reset

Negotiate delta and underlying prices within same event

Functionality of Eurex EnLight at a glance (3/7)

Eurex EnLight Request Details - (StrategyType: BER-C+U) - OPT ON BUND FUTURE - EnID: 16

EnID	Contract	Type	Ratio	Eff Volume	Status	Requester	ReportID
16	BUY OGBL JUN14 10450	P	100	10000	OPEN	TRD0001	
	SELL OGBL JUN14 10400	P	100	10000			
	SELL OGBL JUN14 10500	C	100	10000			

Strategies with or without Futures supported

Firm/Indic	Side	TotQty	OpenQty	DealQty	CLOB Bid	CLOB Ask	LastDealPrc	LastDealQty	LastDealTime
Indic	BUY	100	100	0					

BestBidQty	BestBid	BestAsk	BestAskQty	BestBidULPrc	BestBidULDelta	BestAskULPrc	BestAskULDelta	Show RespondentsCount	Add Favorites
								<input type="checkbox"/>	<input type="text"/>

BidQty	Bid	Ask	AskQty	ULPrc	ULDelta	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	12.00		PrefFULPrc	10					TRD0002 (123123 - 123123)	
					10					TRD0003 (helmut)	

Modify
 End Session
 Duplicate
 Save Favorites
 Add Respondent
 Remove Respondent
 Add Deal

Eurex EnLight Request Details | no rows match filter



Functionality of Eurex EnLight at a glance (4/7)

Eurex EnLight Request Details - (StrategyType: BER-C+U) - OPT ON BUND FUTURE - EnID: 16

EnID	Contract	Type	Ratio	Eff Volume	Status	Requester	ReportID
16	BUY OGBL JUN14 10450 P		100	10000	OPEN	TRD0001	
	SELL OGBL JUN14 10400 P		100	10000			
	SELL OGBL JUN14 10500 C		100	10000			

Firm/Indic	Side	TotQty	OpenQty	DealQty	CLOB Bid	CLOB Ask	CLOB Underlying	MaxTSL	LastDealPrc	LastDealQty	LastDealTime
Indic	BUY	100	100	0				10000			

BidQty	Bid	Ask	AskQty	ULPrc	ULDelta	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	12.00		PrefULPrc	10					TRD0002 (123123 - 123123)	
					10					TRD0003 (helmut)	

Selectively add counterparties

Modify End Session Duplicate Save Favorites Add Respondent Remove Respondent Add Deal

Eurex EnLight Request Details | no rows match filter



Functionality of Eurex EnLight at a glance (5/7)

Eurex EnLight Request Details - (StrategyType: BER-C+U) - OPT ON BUND FUTURE - EnID: 16

EnID	Contract	Type	Ratio	Eff Volume	Status	Requester	ReportID
16	BUY OGBL JUN14 10450 P		100	10000	OPEN	TRD0001	
	SELL OGBL JUN14 10400 P		100	10000			
	SELL OGBL JUN14 10500 C		100	10000			

BUY FGBL JUN14 UnderPrc

RefOnly NegotiateUL

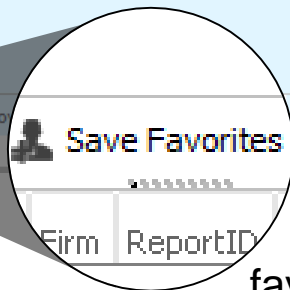
Firm/Indic	Side	TotQty	OpenQty	DealQty	CLOB Bid	CLOB Ask	CLOB Underlying	MaxTSL	LastDealPrc	LastDealQty	LastDealTime
Indic	BUY	100	100	0				10000			

BestBidQty	BestBid	BestAsk	BestAskQty	BestBidULPrc	BestBidULDelta	BestAskULPrc	BestAskULDelta	Show RespondentsCount	Add Favorites
								<input type="checkbox"/>	<input type="text"/>

BidQty	Bid	Ask	AskQty	ULPrc	ULDelta	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	12.00		PrefULPrc	10					TRD0002 (123123 - 123123)	
					10					TRD0003 (helmut)	

Modify
 End Session
 Duplicate
 Save Favorites
 Add Respondent
 Remove

Eurex EnLight Request Details | no rows match filter



Set up favourite list



Functionality of Eurex EnLight at a glance (6/7)

Eurex EnLight Request Details - (StrategyType: BER-C+U) - OPT ON BUND FUTURE - EnID: 16

EnID	Contract	Type	Ratio	Eff Volume	Status	Requester	ReportID
16	BUY OGBL JUN14 10450 P		100	10000	OPEN	TRD0001	
	SELL OGBL JUN14 10400 P		100	10000			
	SELL OGBL JUN14 10500 C		100				
	BUY FGBL JUN14 UnderPrc						

Built-in safety features for RFQ Responder

Side: BUY TotalQty: 100

Firm/Indic	Side	TotQty	OpenQty	DealQty	MaxTSL	LastDealPrc	LastDealQty	LastDealTime
Indic	BUY	100	100	0	10000			

BestBidQty	BestBid	BestAsk	BestAskQty	BestBidULPrc	BestBidULDelta	BestAskULDelta	ULDelta	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	12.00		PrefULPrc			10					TRD0002 (123123 - 123123)	
							10					TRD0003 (helmut)	

Modify
 End Session
 Duplicate
 Save Favorites
 Add Respondent
 Remove Respondent
 Add Deal

Eurex EnLight Request Details | no rows match filter



Functionality of Eurex EnLight at a glance (7/7)

Eurex EnLight Request Details - (StrategyType: BER-C+U) - OPT ON BUND FUTURE - EnID: 16

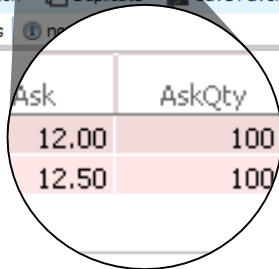
EnID	Contract	Type	Ratio	Eff Volume	Status	Requester	ReportID
16	BUY OGBL JUN14 10450 P		100	10000	OPEN	TRD0001	
	SELL OGBL JUN14 10400 P		100	10000			
	SELL OGBL JUN14 10500 C		100	10000			

Firm/Indic	Side	TotQty	OpenQty	DealQty	CLOB Bid	CLOB Ask	CLOB Underlying	MaxTSL	LastDealPrc	LastDealQty	LastDealTime
Indic	BUY	100	100	0				10000			

BestBidQty	BestBid	BestAsk	BestAskQty	BestBidULPrc	BestBidULDelta	BestAskULPrc	BestAskULDelta	Show RespondentsCount	Add Favorites
								<input type="checkbox"/>	<input type="text"/>

BidQty	Bid	Ask	AskQty	ULPrc	ULDelta	ShownSide	ShownDealPrc	ShownDealQty	Text	Respondent	EnteringRespondent
	PrefBid	12.00		PrefULPrc	10					TRD0002 (123123 - 123123)	
					10					TRD0003 (helmut)	

Modify
 End Session
 Duplicate
 Save Favorites
 Add Respondent
 Remove Respondent
 Add Deal



Easily stay on top of the best prices

www.eurexgroup.com

Screenshot taken from beta version, final design might change.



Appendix



Readiness rebate for early electronic adopters

To optimise the price formation process on Eurex EnLight, Eurex compensates trading participants for being early adopters in building electronic quoting capabilities to respond to RFQs received via Eurex EnLight.

- Trading participants demonstrate their readiness to respond to RFQs in an automated way, by arranging at least 5 deals on Eurex EnLight via ETI exclusively. The deals must result in TES trades.
- Eligible trading participants are granted the following one-off readiness rebates, depending on relative position when demonstrating readiness:
 1. 70,000 € to the first trading participant;
 2. 35,000 € to the second trading participant;
 3. 35,000 € to the third trading participant;
 4. 20,000 € to the fourth trading participant;
 5. 20,000 € to the fifth trading participant;
 6. 10,000 € to the sixth trading participant;
 7. 10,000 € to the seventh trading participant.
- Rebates will be deducted from the monthly transaction fees (possibly spread over more than one month).

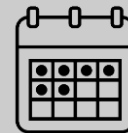
Rebate at a glance



Up to 70,000€



Arranging at least five deals on Eurex EnLight via ETI exclusively.
Must lead to a TES trade.



12 March 2018
until
31 December 2018

Fee rebates for RFQ responders in Fixed Income options

To foster transparency and to improve efficiency around the negotiation of off-book transactions, Eurex aims to incentivise the usage of Eurex EnLight.

- Introduction of a fee rebate program for fixed income TES trades, the details of which were arranged via Eurex EnLight.
- The rebate equals 0.05 € per contract arranged via Eurex EnLight and concluded as TES trade, to be deducted from the Eurex Clearing transaction fees for the relevant fixed income product. The responder's maximum possible fee reduction equals the net Eurex Clearing transaction fees per fixed income product in the relevant month.
- Rebate is granted to trading participants responding to a fixed income RFQ received via Eurex EnLight (responder), if the response was provided within 30 seconds of the initial request, and if the response ultimately leads to a TES trade.
- The Eurex EnLight fee rebate for fixed income products is applicable from 1 March 2018 until 31 December 2018.



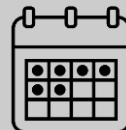
Rebate at a glance



0.05€
per contract arranged via
Eurex EnLight.



Only Fixed Income Options.
RFQ Response has to be
provided within 30 seconds.
Must lead to TES trade.



12 March 2018
until
31 December 2018

All information is available on a dedicated website

Eurex Exchange > Trading > Eurex EnLight

Eurex

Products | **Trading** | Market data | Technology | Education | Resources | About us | Contacts | Language ▾

Eurex Exchange > Trading > Eurex EnLight

Share ▾

- > Trading calendar
- > Production Newsboard
- > Suspension Reports
- > Market Making and Liquidity Provisioning
- > Market model
- > Exchange membership
- > Trader admission
- > Transaction fees
- > Trading tools
- ▼ **Eurex EnLight**
- > Eurex T7 Entry Services

Eurex Group on

[Twitter](#) [LinkedIn](#) [YouTube](#)

Eurex EnLight

Eurex EnLight – a new way to source liquidity

The selective RFQ platform

Eurex took another strategic step to further enhance its market structure by applying its core competences around transparency and process efficiencies to the over-the-counter market.

Eurex further expands and enhances its existing market structure with the electronic price discovery service Eurex EnLight that allows banks and brokers to selectively contact Market Makers with requests for quotes in order to find a trading counterparty. Orders are then automatically transmitted to Eurex' T7 Entry Service for exchange trade confirmation and post-trade processing.

New RFQ platform brings together brokers and Market Makers to safely negotiate off-book trades



www.eurexgroup.com

Brexit - Updates

Brexit Transition Team

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

DBG Brexit

Challenging negotiations and uncertainty

- The UK could be out of the EU on 29 March 2019 – pending final agreement on a transition period.
- In order to ensure ratification of the withdrawal terms in national parliaments – ahead of Brexit in March 2019 – **the effective negotiation period has less than 12 months remaining**
- Key risks, resulting from the short two-year period and the complexity of the issues in question:
 - **It may not be possible to negotiate all relevant issues in the given time frame**
 - EU-UK ties (from withdrawal through to achieving a renegotiated relationship) will not be realigned until an indeterminate future date after that period
- Uncertainty for market participants continues until the full terms of the UK's withdrawal are agreed
 - **“Nothing is agreed until everything is agreed”**
 - – Council of the European Union

DBG Brexit

Brexit Transition Team: Goal and responsibilities

Deutsche Börse has created a Brexit Transition Team to:

- Help our clients to implement a set-up that allows them to be confident regarding their future business in a post-Brexit world – whatever the outcome of the negotiations is in the end
- Closely engage on their post-Brexit strategy, understand pain points, requirements and needs
- Being a face to our clients on the Brexit topic

Our overall goal is to take some complexity out of this process for our clients

Transition Team

Responsibilities

- Manage the full lifecycle of client onboarding
- Coordinate and consolidate Brexit-related outreach within DBG
- Translating clients' post-Brexit aims into transition measures for each DBG entity
- Work closely with the client's project and implementation teams to execute defined deliverables within the agreed timeframe

Transition Team Leads

Legal On-boarding /
Technical
Connectivity Team

Testing Support/
Member Readiness
Team

*Regulatory Team
(Supporting)*

Initial discussions

Evaluation phase

Execution of a tailored transition approach



www.eurexgroup.com

21 Mar 2019

62

DBG Brexit

Brexit Transition Team: Engaging in an open dialogue

- Several members have already started to share their plans with the Transition Team and we are actively already working together on their implementation
- A Webinar has been scheduled for the 23rd of May with the aim of presenting practical information to help you to prepare for the potential impact of Brexit on your company's relationship with Deutsche Börse Group entities (with particular focus on the Trading and Clearing layers)
- To register to the webinar and to engage in an open dialogue with us and start preparing for the transition please sending an email to our Brexit Transition Team mailbox at: brexit-support@deutsche-boerse.com

Disclaimer



© Deutsche Börse AG 2018. All rights reserved.

- Deutsche Börse AG (DBAG), Clearstream Banking AG (Clearstream), Eurex Frankfurt AG, Eurex Clearing AG (Eurex Clearing) as well as Eurex Repo GmbH (Eurex Repo) are corporate entities and are registered under German law. Eurex Zürich AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. Deutsche Boerse Asia Holding Pte. Ltd., Eurex Clearing Asia Pte. Ltd. and Eurex Exchange Asia Pte. Ltd are corporate entities and are registered under Singapore law. Eurex Frankfurt AG (Eurex) is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland and Eurex Zürich AG are in the following referred to as the "Eurex Exchanges".
- All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG and its affiliates and subsidiaries including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Bonds, Eurex Repo as well as the Eurex Exchanges and their respective servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party's use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.
- This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is not intended for solicitation purposes but only for use as general information. All descriptions, examples and calculations contained in this publication are for illustrative purposes only.
- **No obligation to update information:** Deutsche Börse AG does not assume any obligation and does not intend to update any information contained herein.
- **No investment advice:** This presentation is for information only and shall not constitute investment advice. It is not intended for solicitation purposes but only for use as general information.
- All descriptions, examples and calculations contained in this presentation are for illustrative purposes only.

Product Roadmap 2018

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

Agenda

- Market Outlook 2018
- Equity & Equity Index Derivatives
- Fixed Income & FX Derivatives



Market momentum 2017: increased demand for new markets & products

2017 Market Momentum

- Macroeconomic sentiment drove investor demands for new markets & derivatives to cope with low interest rates, reversion of volatility, and regional divergence
- Record low equity market volatility pressured index derivatives business
- Increased derivative hedging of trading books to reduce market risk capital charges

Customer development 2017: solid growth in listed business

2017 Customer Development

- Market participants following cyclical futures trading strategies have suffered in 2017's environment as low equity volatility has lead towards re-calibration of algo-models
- Very solid growth in listed business from major banks. However, compared to European peers, large US banks have intensified their activities in Europe.

Current environment remains favourable for structural growth opportunities

Macroeconomic environment

- Volatility will continue as theme due to high likelihood of further political and macroeconomic disruptions
- Increasing regional divergence in Europe (e.g. Brexit) will create further demand for derivatives as risk management tools
- Eurozone yields remain low and "hunt for yield" persists

Fundamental regulatory reform

- Banks face increased capital requirements for OTC transactions under Basel III capital standards
- Investors start to embrace benefits of transparency and central clearing associated with listed derivatives
- EMIR rules for margining of non-cleared OTC derivatives is a strong driver for migration of OTC towards on-exchange derivatives

Investment trends

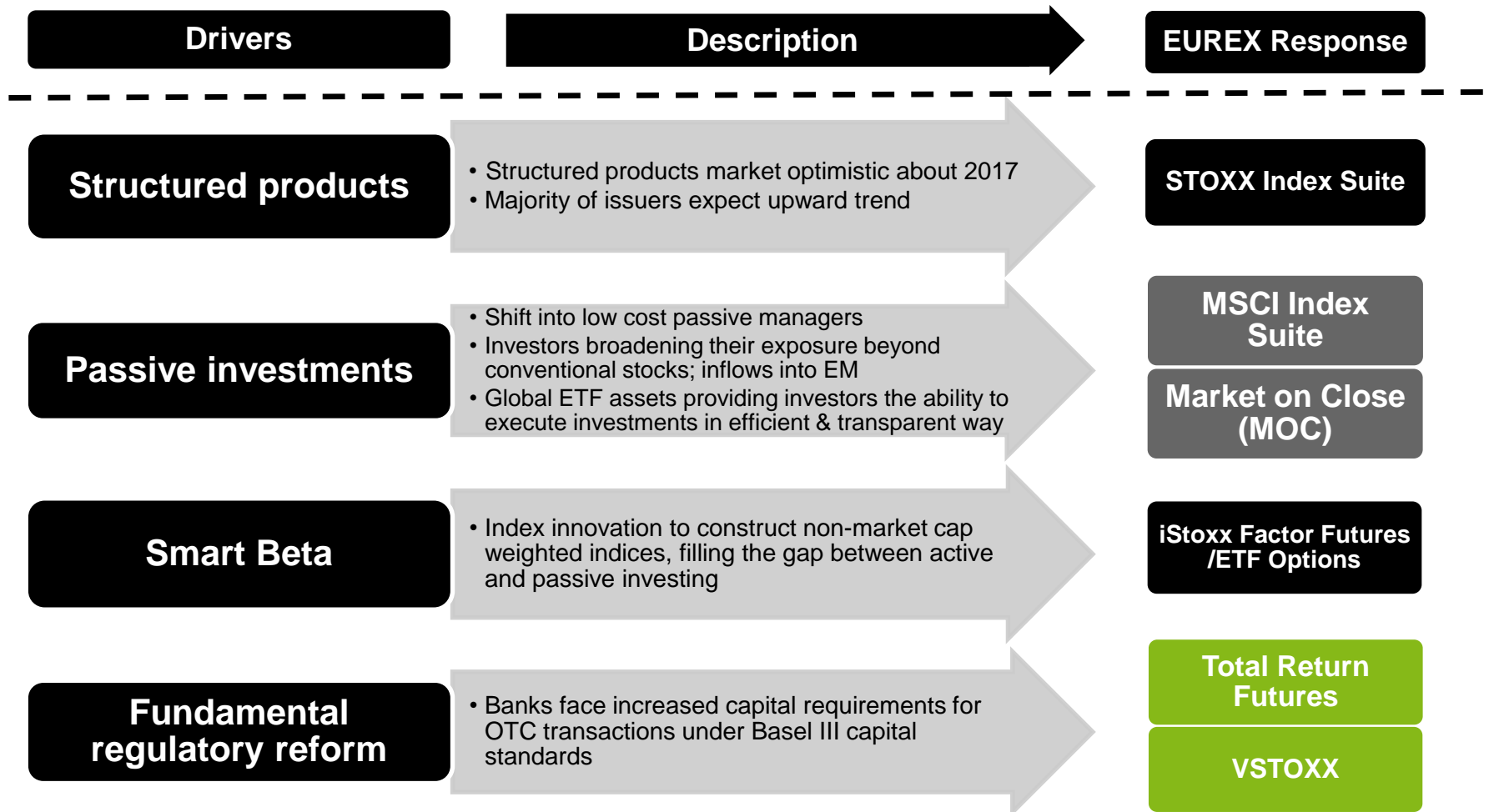
- Growing ETF investing, with global ETF assets reaching \$3.5tn in 2016, expected to exceed \$7tn by 2021
- Index innovation to construct non-market cap weighted indices, filling the gap between active and passive investing
- Structured product issuance and shift to embedded complex payoffs inside the index as a volume driver

Capture cyclical and structural growth opportunities through extension and diversification of product portfolio

Agenda

- Market Outlook 2018
- Equity & Equity Index Derivatives
- Fixed Income & FX Derivatives

Equity Index Derivatives market drivers



Market on Close (MOC): Reducing the Tracking Error

What is Market on Close?

- **Trading of the cash index close level**, e.g. Euro STOXX 50 index via a Eurex listed basis future (Eurex MOC)
- The basis is the difference between current futures price minus the current cash index level) tradable in 0.1 index points
- Eurex **automatically calculates** the final price by adding the traded basis and index cash close level using two decimal points
- Counterparties to receive the final price in the respective Eurex index futures, e.g. Euro STOXX 50 index futures (FESX) in **one transaction**
- Trading possible via **orderbook** or **TES Block Trade**

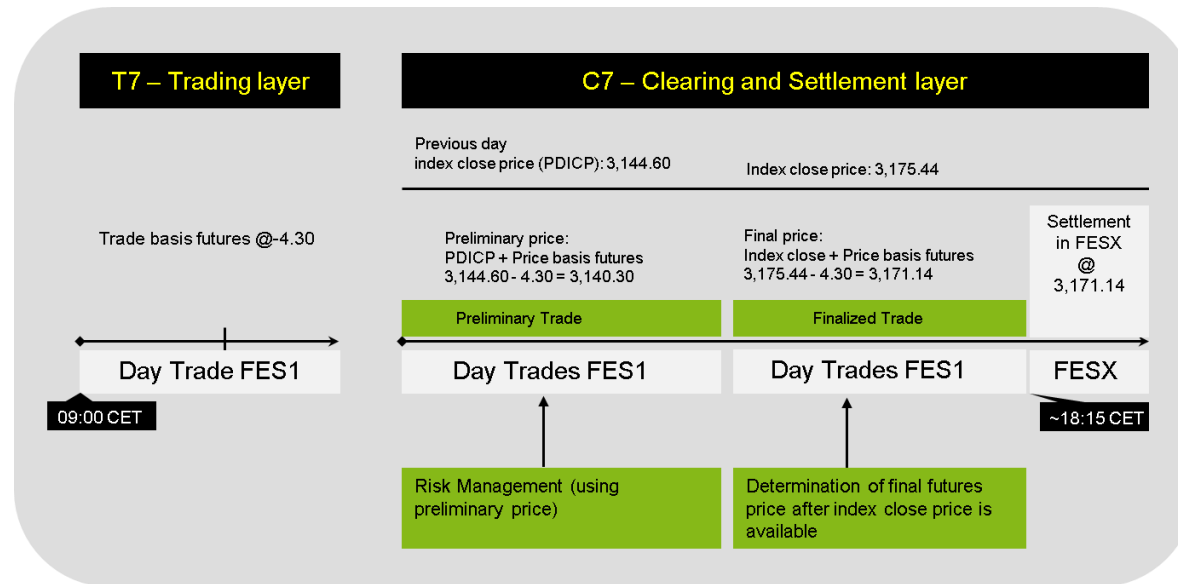
What are the applications?

- **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

Screenshot of Eurex MOC orderbook (FES1)

MC	CPhase	TrdUnit	CPrevSetlPrc	CVal	CBQty	CBid	CAsk	CAQty	CLst	CPotAuct	CQR1	Contract	Curr
	Cont	1.0000	0.0700	10	1,020	-3.20	-3.10	300	-2.90			FES1 Mar18	EUR
					300	-3.50	-3.00	1,000					
					300	-3.60	-2.90	10					
	Cont	1.0000	-83.9300									FES1 Jun18	EUR
	Cont	1.0000	-93.9300									FES1 Sep18	EUR
	Cont											FES1 SPD Mar18 Jun18	EUR
	Cont											FES1 SPD Mar18 Sep18	EUR
	Cont											FES1 SPD Jun18 Sep18	EUR

Process overview for MOC Futures



Points to be considered

- MOC Futures belongs to the group of products using the “**Trade at Reference Price**” logic similar to Total Return Futures or Variance Futures (preliminary price and final price)
- Trading notation represents the basis which may become negative, while the clearing notation is always positive
 - T7 trade confirmation contain both prices
 - C7 clearing confirmation contain the clearing price only
- For transaction reporting requirements the **final price of the MOC Futures (FES1) must be reported**

Market on Close (MOC): Advantages

Potential Applications

- **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

TRF: Strong take-up confirmed from major market players

Key Drivers and Objectives

- Index Total Return Futures (TRF) are designed to offer a **listed solution for trading the implied equity repo rate**
- **Mitigate capital, collateral and balance sheet pressures** due to the new bilateral margining rules for non-cleared OTC derivatives
- Enhance **market transparency**, consolidate **liquidity** and bring **fungibility** to current TRS market

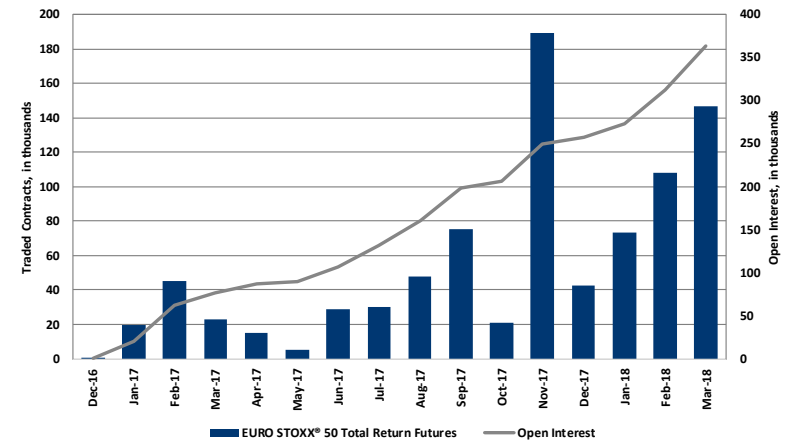
Prerequisites

- **Simple & innovate product** which provides cost efficient access to the pay-out profile of a standard equity index total return swap:
 - **Buyer receives** the total equity performance of the index including distributions
 - Against that, **buyer pays** for the funding cost associated with the equity index leg
 - TRF is quoted and traded in conventional **spread** terms (+/- basis points)

Development since launch on 2 December 2016

- After 1 year **over 540k contracts** traded (EUR 20 bn notional) mainly as TAM trades
 - ADV 2.133 contracts
 - more than 9.5 bn EUR notional open interest
- Continuously **increasing number of participating members** (12 dealer banks & clearers and 5 IDB's)
- Buy-side clients from FR, US, Asia started to become active
- **Transfer of OTC TRF exposure** into TRF on expiring client trades as well as present on boarding of end clients not having access to the OTC TRS market before
- **CFTC approval** and introduction of further expirations up to 26 maturities (DEC27) with 20 maturities already traded

Volume Development TRF Futures



Product to come: Single Stock Dividend Adjusted Futures

Motivation

- Single Stock Futures are exposed to changes in the expected dividend of the underlying share
- The result is a wider bid-offer spread, especially in longer maturities

Solution

- The uncertainty in respect of changes in the expected dividend can be mitigated
- An adjustment of the futures price on the ex dividend day allows user to ignore the expected dividend payment in their futures pricing

Adjustment method

- On ex dividend day, the previous day settlement price is reduced by the actual dividend
- The drop in share price resulting from the dividend payment is neutralized by this adjustment

Product scope/ Launch date

- The initial product scope for Single Stock Dividend Adjusted Futures (SSDAF) will be the constituents of the Euro Stoxx 50® index
- The launch is planned for September 2018

Single Stock Dividend Adjusted Futures

Trading

- Trading in futures at futures Prices
- Futures price = Stock price + cost of carry

	FM	CPhase	TrdUnit	CPrevSetlPrc	CVol	CBQty	CBid	CAsk	CAQty	CLst	Contra
⊕		Cont	100.0000	60.294800		20	59.9704	60.0890	20		DAIF Sep17
⊕		Cont	100.0000	60.275700		20	59.9560	60.0746	20		DAIF Oct17

Clearing

- Real time clearing in futures at futures Prices
- P&L generation via daily variation margin

Adjustment method

- Price Correction Method: start of day position will be booked out at the previous day settlement price and booked back in at the adjusted previous day settlement price
- Only regular dividends are adjusted. Corporate actions are treated via R-factor before the Price Correction Method is applied

Example

	ex-date - 1	Start of day position	ex-date step 1	ex-date step 2
Position	Long 1 SSDAF	Long 1 SSDAF	Book out: short 1 SSDAF	Book in: long 1 SSDAF
Settlement Price	15	11	11	11
Absolute (Regular) Dividend Amount		2	2	2
Previous day settlement price for SSDAF	14		technical trade at 15	(technical trade at 15-2)=13
Contract trade unit	100	100	100	100
Variation Margin	$[(15-14)*100]*1=100$	$(11-15)*100*1=-400$	$(11-15)*100*(-1)=400$	$(11-13)*100*1=(-200)$



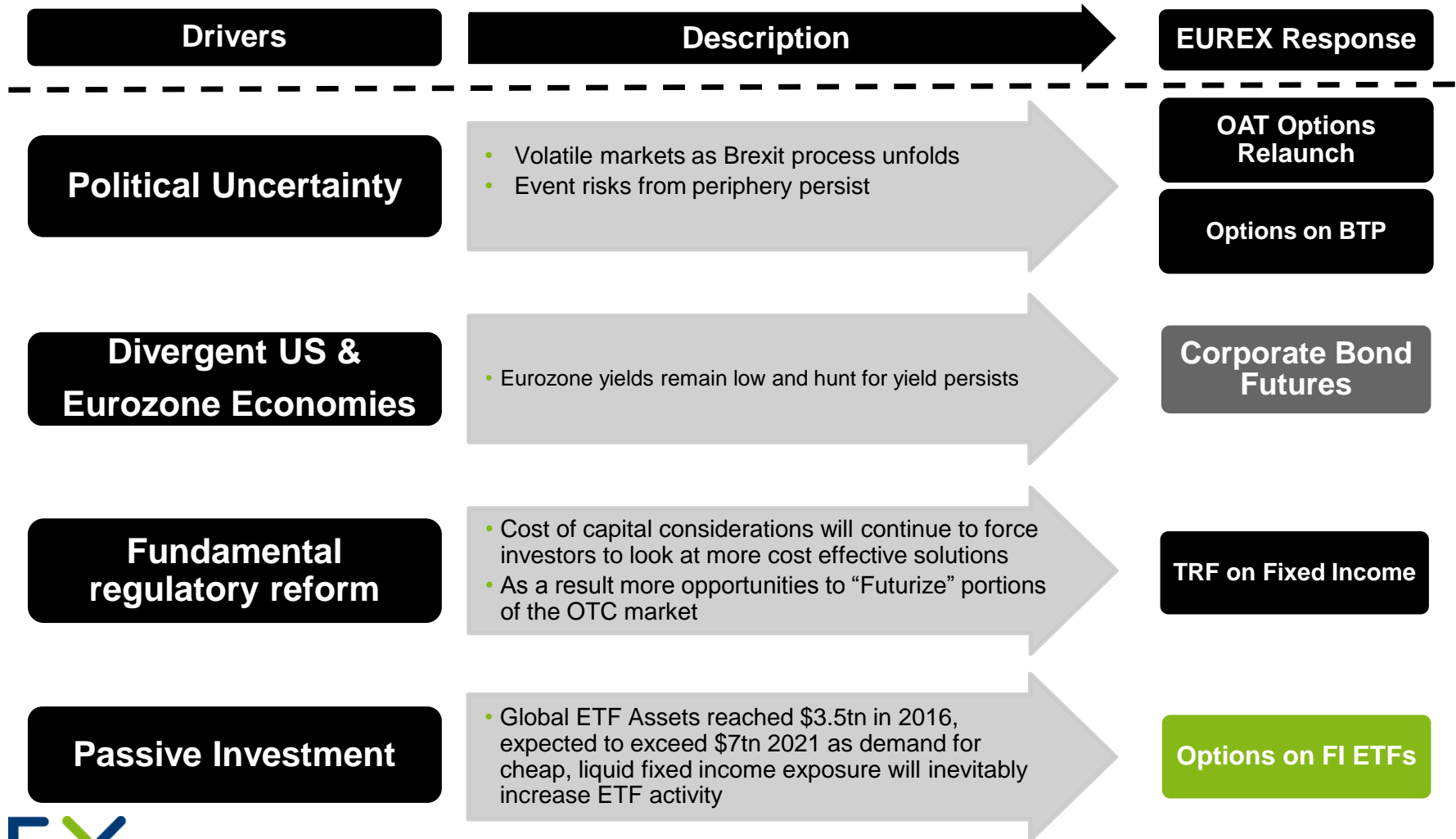
^{*)} Regular dividends = gross (100%) of declared dividends, paid either in cash or shares. Share dividends are usually included at the cash equivalent amount

Agenda

- Market Outlook 2018
- Equity & Equity Index Derivatives
- Fixed Income & FX Derivatives



Fixed Income Derivatives market drivers

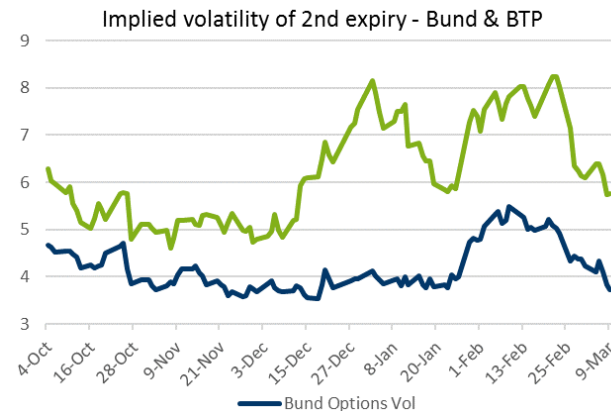
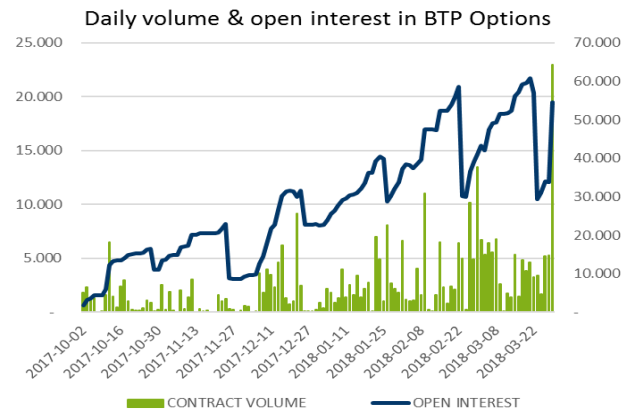


www.eurexgroup.com

Options on Euro-BTP Futures

Liquidity Development

- BTP Options were launch on October 2, 2017 with the onscreen quotation support of two market makers
- The velocity of bond price movements are now observable, and the implied volatility of BTP options has provided a number of trading opportunities since the launch
- Typically, 200 contracts are quoted per strike price for calls and puts
- The daily volume record stands at 22,925 contracts that traded on March 29, 2018
- Average daily volume 2018: 3,400 contracts; Open interest: + 60,000 contracts



Next Steps

- Eurex hosted well attended investor presentations in Italy together with Bloomberg and bank sales, research and volatility specialists, and will continue to engage investors in Italy and beyond

Market Makers

Three market makers are ready to quote prices to institutional clients

- MAKO Fixed Income Partnership LLP - Graham Windett - T +44(0)207-862 0559 - graham.windett@makoglobal.com
- Susquehanna International Securities Ltd. - Tom Quille - T + 35 3 124 78 659 - tom.quille@sig.com
- Banca Aletti (only block trades) - Maurizio Spadaccino T +39 024 3358 423 - maurizio.spadaccino@alettibank.it



www.eurexgroup.com

Futures on Euro STOXX 50[®] Corporate Bond Index

Exchange traded &
cleared derivative

Optimized Portfolio
Management

Spread trading
opportunities

Efficient hedging tool

Product Launch

- The credit and corporate bond market is one of the few areas in Fixed Income where electronification is in its infancy, that offers opportunities for futurization in the derivatives space
- Futures on Euro STOXX 50[®] Corporate Bond Index were launched on September 19, 2017 with the on screen quotation support of one market maker,
- Eurex opens a new asset class, being the first mover that offers an exchange traded and cleared solution for the European corporate bond market, with the option to extend the product offering to other indices
- Eurex opens up a completely new asset class with complementary hedging tools alongside the existing Eurex offering to its global customer base

Liquidity Development

- Several smaller trades took place in Q4, and the first futures expirations in December and March went smoothly
- As of March 1, 2018 the EURO STOXX 50[®] Corporate Bond Index Future is now available for direct access in the United States. It is the first time the U.S. Commodity Futures Trading Commission certified a debt security index future
- Many participants that were interested in providing liquidity from the outset were forced to push back their readiness due to MiFiD II related resource constraints
- Follow up meetings took place with potential liquidity providers in 2018. Currently 2 banks are in a progressed implementation phase
- Focus on sales and marketing activities in 2018 for buy- and sell side clients
- Several individual buy-side client meetings were held in Q1 2018 including participation in the buy-side committee
- Overall feedback still positive, on average buy side clients are looking for an ADV of around 1000 contracts

Next Steps

- Eurex is focusing on establishing liquidity in this futures product



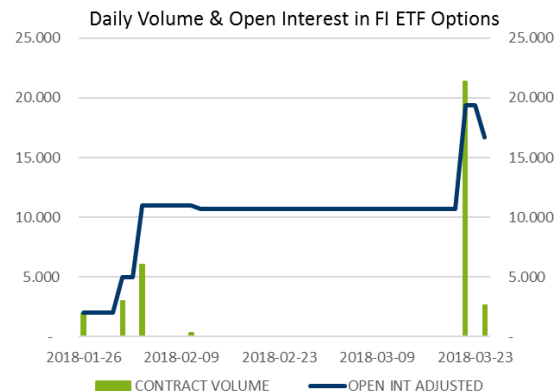
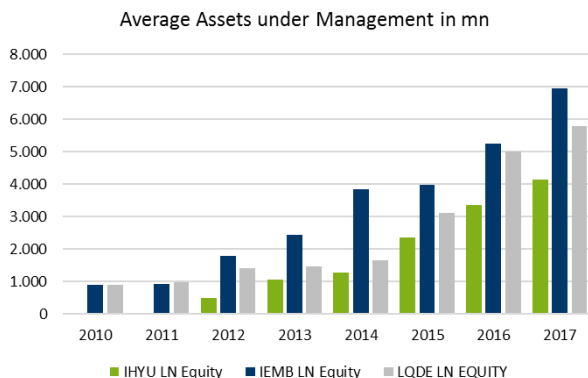
www.eurexgroup.com

Options on Fixed Income ETFs

Product Launch on Nov 20, 2017

Fixed Income ETF Options were launched in November 2017 on the underlyings:

- IHYU LN – iShares USD High Yield Corporate Bond ETF - tracks Markit iBoxx USD Liquid High Yield Capped Index
- IEMB LN – iShares J.P. Morgan USD Emerging Market Bond ETF - tracks the JPM EMBI Global Core Index.
- LQDE LN – iShares USD Corporate Bond ETF - tracks the Markit iBoxx USD Liquid Investment Grade Index.



Options on IHYG traded 35,000 contracts in 2018

Next Steps

- Eurex & BlackRock produced an online video series and conducted roadshows and a series of client events, and we will continue our client outreach and concentrated efforts to bring more liquidity to FI ETF options

Liquidity Providers

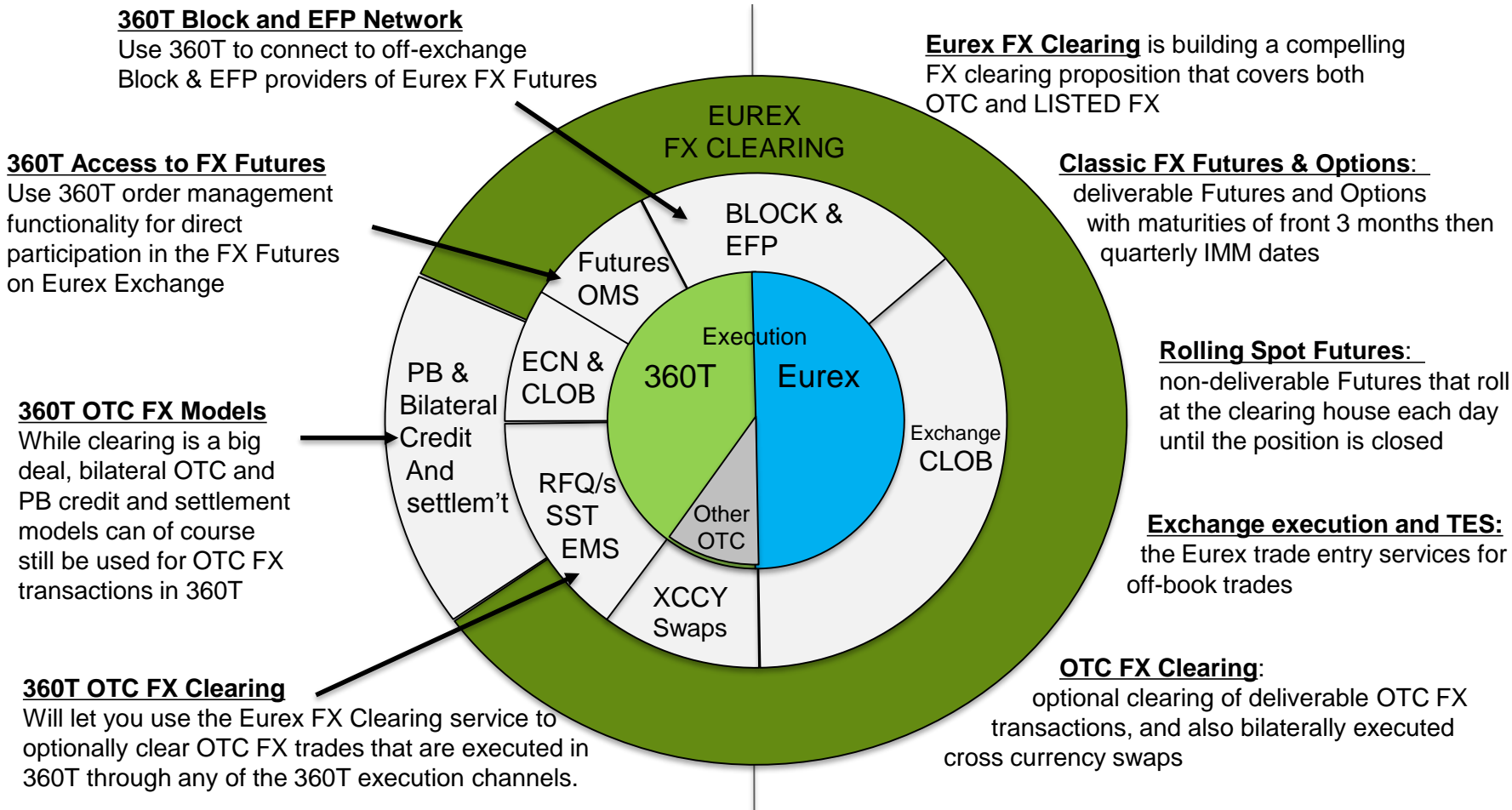
Currently three dealers are ready to quote prices to institutional clients:

- Credit Suisse - Dan Carr - T +44-20-78 88-34 73 - daniel.carr@credit-suisse.com
- Goldman Sachs - Declan Curry - T +44-20-70 51-87 41 - declan.curry@gs.com
- Deutsche Bank - Wolfgang Stefan - T +44-20-75 45-42 85 - wolfgang.stefan@db.com

A further liquidity provider is in the pipeline and finalizing their readiness



Breadth and Depth of DBG FX offering



Additionally: STOXX FX Rolling Spot Index, and DBG Market Data & Services

www.eurexgroup.com



The DBG Listed FX Suite

The Listed FX Suite

- Eurex Exchange listed contracts, with all-to-all exchange model, trading 00:55 Sun - 23:00 Fri CET
- Equitable marketplace structure, with dual latency paths to Eurex orderbook
- Block and EFP facilities allowing off-order book negotiated trades to be submitted
- Tight integration with 360T giving clients direct orderbook access and interaction with Block/EFP LPs
- 12 Currency Pairs: EUR/USD, EUR/CHF, EUR/GBP, GBP/USD, GBP/CHF, USD/CHF, AUD/USD, AUD/JPY, EUR/AUD, EUR/JPY, USD/JPY, NZD/USD
- All contract sizes 100,000 base currency, with flexible fee currency of USD or product currency
- Cleared at Eurex Clearing, giving margin efficiencies including multilateral netting
- 360T GUI users get access to Eurex FX Futures - order management and LP network for Block/EFP

„Classic“ Futures and Options

- Traditionally styled FX Futures and Listed FX Options contracts
- Maturities up to 3 years: 3 serial, 3 quarterly, 4 semi-annual expiries March/Jun/Sep/Dec cycle (IMM)
- All contracts are deliverable via CLS
- Use of calendar spreads to mimic OTC FX Swaps market with Listed & Cleared FX products

Rolling Spot Futures

- Product simplicity – no physical delivery and no expiration date; position rolls each day until closed
- Perpetual contracts with no physical delivery of the currency legs ... and no CLS costs
- Cost efficiency - contracts roll at MID spot rate plus MID T/N to apply interest rate differential pass through between long/short position holders. PNL is realized through CCP margin process.
- Optimal margin as RSF uses 2 day holding period (v 5d OTC Cleared Spot) in margin calculations
- Designed to mimic OTC rolled spot while removing costs and PB reliance, and adding CCP benefits

Next Steps

- New Liquidity Provider (LP) Scheme will start as of 01.06.2018. Minimum 5 LP committed to provide liquidity in both FX Futures products.



www.eurexgroup.com



Contact

Tobias Ehinger

Senior Vice President

Product Research & Development Equity and Index Derivatives

Deutsche Börse AG

Mergenthalerallee 61

65760 Eschborn

Germany

Phone

+49 69 211 12313

E-mail

tobias.ehinger@eurexchange.com

Trading Hours Extension

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

Summary

Key Facts

- In Dec 2018 Eurex will extend its trading and clearing hours to also cover the Asian time zone
- Products in scope are Eurex' liquid benchmark Futures and MSCI Futures, Options are out of scope
- Market opening is planned for 8am SGT; end of the trading & clearing day remains unchanged
- Major trading and clearing functionalities incl. TES (Block Trade, etc.) will be available in Asian hours
- The Trading day will start with a Pre-Trading phase, followed by Pre-Opening, an Opening Auction and Continuous Trading
- *Please note: The introduction of an Intraday Auction in the European morning hours (7.50am – 8am CET) is currently assessed on a product by product basis – see figure below*

Proposed Trading & Clearing Day (subject to market feedback)

Eurex Trading Hours for selected Futures as of Dec 2018



www.eurexgroup.com

- Singapore time during European Daylight saving time
Time Difference: SGT / CET: +7h; SGT / CEST: + 6h

Product Scope for Launch Date (Dec 2018)

Equity Index Futures

- Liquid Benchmark Futures
 - **FESX (EuroStoxx50 Futures)**
 - **FDAX (DAX Futures)**
 - **FDXM (miniDAX Futures)**
- All **Eurex MSCI Futures**

Fixed Income Futures

- Liquid Benchmark Futures (Germany)
 - **FGBX (30y - Buxl Futures)**
 - **FGBL (10y - Bund Futures)**
 - **FGBM (5y - Bobl Futures)**
 - **FGBS (2y - Schatz Futures)**

Major Design Elements – Trading

General

- Trading system T7 is planned to be available daily from Monday 1am CET to Friday 10pm CET
- All trading functionalities available including T7 Entry Service (TES)
- Full re-use of existing Eurex membership, technical infrastructure, login data and trader IDs

Market Integrity

- **Risk Protection for Market Makers:** the Eurex system provides MMs with various features for system-based risk protection. With these tools, MMs can significantly constrain operational and market risks, preventing too many simultaneous trade executions on quotes provided by a MM
- **Market Model and Functionalities:** includes functionalities for self-match prevention and handling of mistrades
- **Volatility Interruption:** the risk that markets decline in large price drops is not only a result of market orders but also limit orders. To guard against that, in its benchmark products, the Eurex system validates every single trade against price bands within given time frames. If the system concludes that price determination lies outside the price bands, it automatically stops regular order book trading
- **Market Supervision:** provides an on-going level of support during trading hours, using various parameters and triggers to monitor abnormalities in the order book activity and ensure there is a fair and orderly market

Major Design Elements – Trading

Liquidity Provision during Asian Trading Hours

- Liquidity Provision (LP) programs for the Asian time zone combined with attractive incentive schemes
- Commitment of at least 3 Liquidity Providers is prerequisite for products to be listed during Asian hours
- MiFID II: the “50% threshold” for the status of “Regulatory Market Making” cannot be reached by merely quoting during the Asian trading hours
- Eurex has already secured a sufficient number of Liquidity Providers for the Asian trading hours

Liquidity Providers

Liquidity Providers (as of 30 Apr 2018)	Equity Index				Fixed Income			
	FESX	FDAX	FDXM	MSCI	FGBL	FGBM	FGBS	FGBX
Firm 1 (SG)	✓	✓	✓	✓				
Firm 2 (SG)	✓	✓	✓		✓	✓	✓	
Firm 3 (US)					✓	✓	✓	
Firm 4 (US)	✓				✓	✓	✓	
Firm 5 (KR)	✓							
Firm 6 (HK)	✓	✓	✓	✓	✓	✓	✓	✓
Firm 7 (UK)	✓	✓	✓		✓	✓	✓	✓
Firm 8 (US)	✓	✓	✓		✓	✓	✓	✓
Firm 9 (SG)	✓			✓				
Firm 10 (UK)	✓	✓	✓		✓	✓	✓	✓
Firm 11 (UK)	✓				✓	✓		
Total # Liquidity Providers	10	6	6	3	8	8	7	4
Status vs Target (3 LPs)	●	●	●	●	●	●	●	●



Major Design Elements – Clearing & Risk

General

- Clearing and risk functionalities available during extended trading hours
- Full re-use of existing Eurex Clearing membership, technical infrastructure, login data and Member ID
- Intraday Risk Management; Intra-night Margin calls to be fulfilled during extended hours
- Staff must be reachable during Asian trading hours
- Post-trade functionalities expected to be available for selective products during the Asian hours

Risk Management

- Risk functionalities (portfolio-based margining methodology) currently used during the regular trading hours to be applied during the Asian trading and clearing hours for active products (further optimisation and analysis ongoing)
- Advanced Risk Protection handling (level 1: alert, level 2: slow down, level 3: halt) based on PRISMA calculations available during Asian trading and clearing hours
- No changes to default management process
- Same Intraday risk reports as of today (e.g. CI042, CI050, CI060) offered during the Asian hours to members on Common Report Engine (CRE)
- Real time risk monitoring and consistent margin call procedures during Asian hours
- Margin calls to be fulfilled in AUD or via existing USD payment infrastructure during Asian hours

Major Design Elements – Clearing & Risk

Margin Calls during Asian Hours

- Existing margin call procedures for activities during the standard trading session will remain unchanged:
 - Overnight margin calls are auto debited the following morning by 8am CET (EUR) / 9am CET (CHF/GBP)
 - Regular intraday margin calls may be issued between 8am CET and 10pm CET (today's practice)
- *New: Margin calls during Asian hours shall only be issued in the case of position changes (i.e. no intra-night margin call solely based on market movements)**
- Calculated overnight shortfalls are “set to zero”, i.e. Eurex Clearing will consider overnight margin calls as fulfilled by the start of Asian hours, even though the call will only be debited by 8am CET (EUR) / 9am CET (CHF/GBP). Eurex Clearing will treat all collateral pools flat or over-collateralized for the start of Asian hours*
- Eurex Clearing will only issue a margin call during Asian hours, if the intraday margin limit has been exceeded (in general 10% of the Clearing Member's overnight margin requirement per pool)*

Correspondent Banks

- Available correspondent banks for USD include Citibank N.A., Deutsche Bank Trust, Bank of New York Mellon, JP Morgan Chase Bank N.A., JP Morgan Chase Bank N.A., London, and Bank of America
- Available correspondent banks for AUD: ANZ Banking Group Limited and Westpac Banking Corporation

*subject to regulatory approval



www.eurexgroup.com

Major Design Elements – Clearing & Risk

Asia Hours Margin Calls - Mitigating Measures

- Clearing Members can pledge additional cash and non-cash collateral with Eurex (i.e. over-collateralization) during regular hours on the preceding business day to avoid margin calls during Asian hours
- Clearing Members can define a Permanent Cash Balance (PCB) to establish a cash buffer which is automatically restored on a daily basis
- Clearing Members may actively manage their total margin requirement by entering risk reducing trades
- Clearing Members have the possibility to delete their own open orders from the order book prior to Asian hours market opening to avoid position changes and hence margin calls during the extended session

Contacts

Business Development

Markus Georgi

Eurex Hong Kong Office
2904-7, 29/F Man Yee Building
68 Des Voeux Road Central
Hong Kong

P: +852 2530 7820
markus.georgi@eurexchange.com

Market Readiness Clearing

Hina Toscano Jimenez

Deutsche Börse
Mergenthalerallee 61
65760 Eschborn

P: +49 69 211 13823
hina.toscano.jimenez@deutsche-boerse.com

Market Readiness Trading

Frank Horneff

Eurex Frankfurt
Mergenthalerallee 61
65760 Eschborn

P: +49 69 211 15 751
customer.readiness@eurexchange.com

in Asia

Mezhgan Qabool

Eurex Singapore Office
9 Raffles Place, #56-01
Republic Plaza
Singapore 048619

P: +65 6597 3061
mezghan.qabool@eurexchange.com

in Europe

Philipp Schultze

Eurex Zürich Office
Löwenstrasse 3
8021 Zurich
Switzerland

P: +41 43 430 7126
philipp.schultze@eurexchange.com

in US

Jean-Luc Savignac

Eurex New York Office
60 Broad Street, 26th floor
New York, NY 10004
USA

P: +1 312 544 1073
jeanluc.savignac@eurexchange.com



© Eurex 2018

Deutsche Börse AG (DBAG), Clearstream Banking AG (Clearstream), Eurex Frankfurt AG, Eurex Clearing AG (Eurex Clearing) and Eurex Repo GmbH (Eurex Repo) are corporate entities and are registered under German law. Eurex Zürich AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. Deutsche Boerse Asia Holding Pte. Ltd., Eurex Clearing Asia Pte. Ltd. and Eurex Exchange Asia Pte. Ltd are corporate entities and are registered under Singapore law. Eurex Frankfurt AG (Eurex) is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland and Eurex Zürich AG are in the following referred to as the “Eurex Exchanges”.

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG and its affiliates and subsidiaries including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Repo as well as the Eurex Exchanges and their respective servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party's use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is not intended for solicitation purposes but only for use as general information.

All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Eurex and Eurex Clearing offer services directly to members of the Eurex exchanges respectively to clearing members of Eurex Clearing. Those who desire to trade any products available on the Eurex market or who desire to offer and sell any such products to others or who desire to possess a clearing license of Eurex Clearing in order to participate in the clearing process provided by Eurex Clearing, should consider legal and regulatory requirements of those jurisdictions relevant to them, as well as the risks associated with such products, before doing so.

Only Eurex derivatives that are CFTC-approved may be traded via direct access in the United States or by United States persons. A complete, up-to-date list of Eurex derivatives that are CFTC-approved is available at: <http://www.eurexexchange.com/exchange-en/products/eurex-derivatives-us>. In addition, Eurex representatives and participants may familiarise U.S. Qualified Institutional Buyers (QIBs) and broker-dealers with certain eligible Eurex equity options and equity index options pursuant to the terms of the SEC's July 1, 2013 Class No-Action Relief. A complete, up-to-date list of Eurex options that are eligible under the SEC Class No-Action Relief is available at: <http://www.eurexexchange.com/exchange-en/products/eurex-derivatives-us/eurex-options-in-the-us-for-eligible-customers...> Lastly, U.S. QIBs and broker-dealers trading on behalf of QIBs may trade certain single-security futures and narrow-based security index futures subject to terms and conditions of the SEC's Exchange Act Release No. 60,194 (June 30, 2009), 74 Fed. Reg. 32,200 (July 7, 2009) and the CFTC's Division of Clearing and Intermediary Oversight Advisory Concerning the Offer and Sale of Foreign Security Futures Products to Customers Located in the United States (June 8, 2010).

Trademarks and Service Marks

Buxl®, DAX®, DivDAX®, eb.rexx®, Eurex®, Eurex Repo®, Eurex Strategy WizardSM, Euro GC Pooling®, FDAX®, FWB®, GC Pooling®, GCP1®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAX-NEW® and Xetra® are registered trademarks of DBAG. All MSCI indexes are service marks and the exclusive property of MSCI Barra. ATX®, ATX® five, CECE® and RDX® are registered trademarks of Vienna Stock Exchange AG. IPD® UK Quarterly Indexes are registered trademarks of Investment Property Databank Ltd. IPD and have been licensed for the use by Eurex for derivatives. SLI®, SMI® and SMIM® are registered trademarks of SIX Swiss Exchange AG. The STOXX® indexes, the data included therein and the trademarks used in the index names are the intellectual property of STOXX Limited and/or its licensors. Eurex derivatives based on the STOXX® indexes are in no way sponsored, endorsed, sold or promoted by STOXX and its licensors and neither STOXX nor its licensors shall have any liability with respect thereto. Bloomberg Commodity IndexSM and any related sub-indexes are service marks of Bloomberg L.P. PCS® and Property Claim Services® are registered trademarks of ISO Services, Inc. Korea Exchange, KRX, KOSPI and KOSPI 200 are registered trademarks of Korea Exchange Inc. BSE and SENSEX are trademarks/service marks of Bombay Stock Exchange (BSE) and all rights accruing from the same, statutory or otherwise, wholly vest with BSE. Any violation of the above would constitute an offence under the laws of India and international treaties governing the same. The names of other companies and third party products may be trademarks or service marks of their respective owners.



www.eurexgroup.com

Eurex Clearing Roadmap 2018

Planned Releases & Enhancements

May 2018



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo

Agenda

- Eurex Clearing Roadmap 2018
 - Introduction
 - Eurex Clearing's C7
 - Eurex Clearing Prisma
 - EurexOTC Clear
 - Eurex Clearing's Securities CCP


Introduction

Review of 2017

	2017												Jan	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Regulatory (MiFIR/ EMIR)													Dec 4 th	
Indirect Clearing/ GOSA Go-live												◆		
STP Rules Go-live												◆		
C7														
Release 4.0												◆		
EurexOTC Clear														
Release 7.1 / OTC IRS, OTC FX								◆ FX products				◆		
Release 8.0 / OTC IRS, OTC XCCY														
CCP														
Release 12.0 / T2S 4th wave introduction		◆ February 7 th												
Release 12.5 CCP holiday processing				◆ April 3 rd										
Release 13.0 Securities Lending (EUI) / Xetra T7 Migr.						◆ June 19 th								
Release 14.0 CCP reports enh. / Securities Lending											◆ November 20 th			
New Products														
Listed FX Future 23h trading		◆ February 27 th												
Rolling Spot Future														
Market on Close (Moc) FESX									◆ September 4 th					
Eurex Clearing Prisma														
Release 5.1						◆ June 12 th								
Release 6.0												◆		

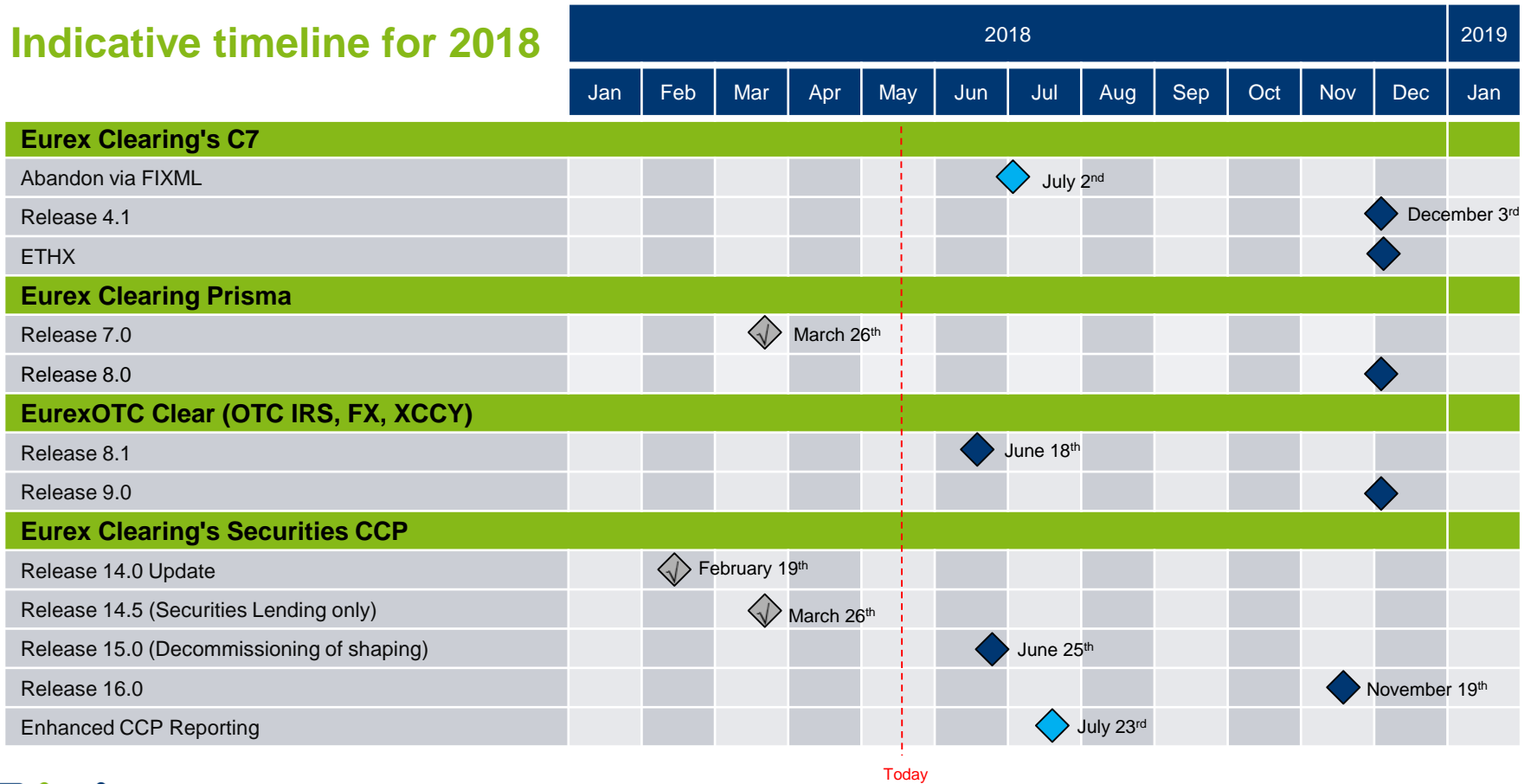


 Simulation Period www.eurexgroup.com

 Production Launch

Introduction

Indicative timeline for 2018



Agenda

- Roadmap 2018
 - Introduction
 - Eurex Clearing's C7
 - Eurex Clearing Prisma
 - EurexOTC Clear
 - Eurex Clearing's Securities CCP

Planned Enhancements for C7

Abandonments via FIXML, as of Monday, 2 July 2018

- FIXML allows members to automate certain position/ transaction management functions
- Members requested to also allow abandonments for automated exercises at the last trading day via FIXML
- Availability of text fields usage will be introduced for abandon via FIXML
 - Report enhancement on CE780 (Exercise Abandon Daily Maintenance Overview) in regards to the text fields will be introduced at a later point in time
- FIXML Broadcast messages will be provided for abandonment entries via GUI and FIXML
- Abandonments will be reported with TrnsfrRsn 127 in broadcast message
- This function will be available for testing (C7 simulation environment) as of Monday, 14 May 2018

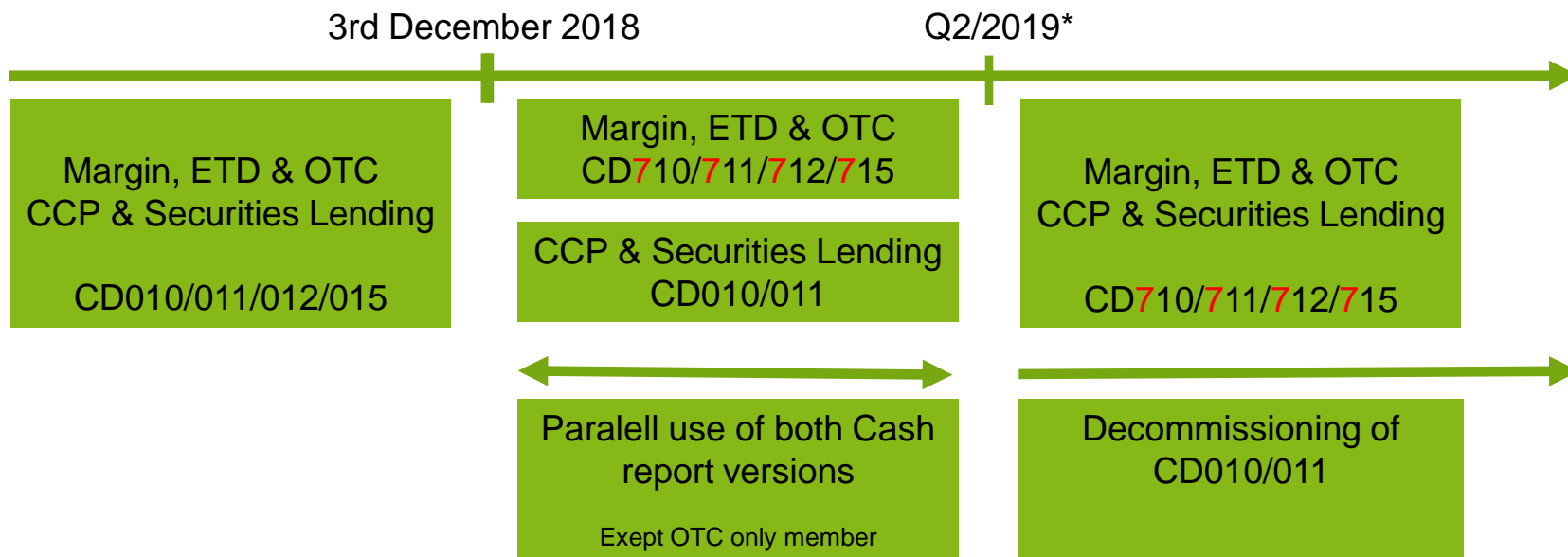
C7 Release 4.1 (1/7)

Migration of C7 Payment Service

Eurex Clearing will move payment services to the C7 architecture to reduce infrastructure complexity. This migration will have an impact on cash reports provided to Eurex Clearing’s clients. The introduction of changed reports will be staggered over two release dates.

The new reports CD71x will be made available in three formats: print version, xml and csv.

Timeline for Migration



C7 Release 4.1 (2/7)

Migration of Advanced Risk Protection service

- The Advanced Risk Protection (ARP) service including limit maintenance and stop/release function will be migrated from Eurex Classic to Eurex Clearing's C7.
- It is planned to offer a dedicated maintenance period 2-4 weeks ahead of the go-live in order to allow members to maintain ARP roles and privileges in C7.
- Eurex Clearing will migrate existing limits set by members in Eurex Classic to C7.
- Members can compare the settings in Eurex Classic with those in C7 using download functions. A dedicated conversion report will not be provided.

C7 Release 4.1 (3/7)

Enhancements to Billing Report's

Eurex Clearing will implement changes to reports CB001 and CB165 to answer FIA requirements.

Report CB001

- Report will be extended to incorporate a fee change within a short time before the effectiveness close to its publication by circular to be able to see the previous, current and new fee

Report CB165

- Report will be extended to show additional the calculated fee without any reductions (i.e. without the application of the reduced fee above a certain contract volume threshold)

Further details will be communicated in due time

C7 Release 4.1 (4/7)

Gross position keeping on M-accounts

- Current net-position keeping in M-accounts (Market Maker accounts) restricts available transaction management functionality
- Eurex Clearing will introduce a gross-handling of M-Accounts answering an FIA request to enhance transaction management functionality on these position accounts.*
- Auto Close-out functionality including Zero Cost Quantity (ZCQ) calculation will be activated for M-accounts simultaneously.
- Eurex Clearing will set the Auto Close-out and ZCQ flags to “yes” during the conversion, to mirror current behaviour as much as possible. This setup will automatically trigger close-outs at the end of each clearing day until the ZCQ is exhausted.
- Members can enable/disable the setting for Auto Close-out in combination with the use of the Zero Cost Quantity via the C7 Derivatives Clearing GUI.
- The availability for testing in simulation will be communicated in due time.

**A dedicated overview of the maintenance events with regards to the enhanced functionality for M-accounts can be found in the appendix.*



www.eurexgroup.com

C7 Release 4.1 (5/7)

Extension of Transaction duration / lifetime from 2 to 3 days

- Currently, transaction management is possible on the actual trade day as well as on t+1 and t+2.
- Members requested to extend the transaction management period from t+2 to t+3 days.
- Once introduced, members can perform transaction management functions (e.g. give-up/ take-up, trade separation etc.) on the actual trade day as well as on t+1, t+2 and t+3
- This function will be available for testing as of Friday, 26 October 2018

C7 Release 4.1 (6/7)

Reduction of available characters in text fields

- T7 and C7 will no longer allow the usage of special characters in text fields in order to prevent their usage for defining Java or XML scrips.
- Affected characters are listed below:
 - ["]; [&]; [=]; [`]; [@]; [+]; [']; [<]; [>]
- Eurex is required not to distribute such potentially dangerous scripts to members through script enabled interfaces.
- Most browsers and XML parsers are script enabled – We have no control how members would configure their application.

C7 Release 4.1 (7/7)

Final decommissioning of AMQP 0-10 version

- Currently, AMQP versions 0-10 and 1.0 are supported as protocol for Eurex Clearing FIXML Interface
 - AMQP 1.0 can be used for inquiries and broadcasts
 - AMQP 0-10 can be used for broadcasts only
- Due to Red Hat's termination of support for AMPQ 0-10, Eurex Clearing has decided to disable the AMQP 0-10 connectivity on Monday, 3 December 2018 for all production systems.
- Eurex Clearing discontinued the support of AMQP 0-10 for FpML and FIXML inquiries last year already.
- AMQP 1.0 will continue to be available as today

Agenda

- Roadmap 2018
 - Introduction
 - Eurex Clearing's C7
 - Eurex Clearing Prisma
 - EurexOTC Clear
 - Eurex Clearing's Securities CCP

Eurex Clearing Prisma Release 8.0

Introduction of TEA

Prisma Release 8.0 focuses on the introduction of Time To Expiry Adjustment (TEA).

- This change in calculation facilitates proper handling of market risk from positions close to expiry. It penalizes these positions within the portfolio by explicitly considering their hedging and/or directional disposition within the portfolio.
- The margin effect of the expired positions will increase incrementally prior to expiry, based on the risk horizon of the liquidation group.
- TEA causes changes in reports and TE files and will be reflected in the User Guide Methodology Description

Introduction of a new Settlement Price File:

- In contrast to the other Prisma TE files, this file does include instruments on the expiration day itself.
- The new Settlement Price File will make the (old) RBM Theo Price File will be redundant.

Eurex Clearing Prisma Release 8.0

Decommissioning of the TE files from Eurex Clearing's website and preponement of EoD delivery

- With Prisma release 8.0 the following three Transparency Enabler (TE) files will no longer be available on Eurex Clearing's website:
 - Transparency Enabler Data – Start of Day
 - Transparency Enabler Data – Intraday
 - Transparency Enabler Data – End of Day
- **We would like to refer all members and vendors to our standard report distribution service - Common Reporting Engine - where all TE continue to be available.**
- Eurex Clearing plans to prepone the EoD TE Files based on a snapshot of 20:30 CET

Agenda

- Roadmap 2018
 - Introduction
 - Eurex Clearing's C7
 - Eurex Clearing Prisma
 - EurexOTC Clear
 - Eurex Clearing's Securities CCP

EurexOTC Clear Release 8.1/9.0

Service enhancements for OTC IRS and OTC Currency Products

- Reports, broadcast messages and EurexOTC Clear GUI will be enhanced with
 - Fields for Product ISIN, CFI Code (Classification of financial instrument), Trading Venue MIC (needed for EMIR Article 9 reporting)
 - A field for the type of venue, where a trade was executed (e.g. SEF, DCM, ETP, MTF, OTF, OffFacility)
- All timestamps in XML formatted Member Reports and FpML messages (sent out by Eurex Clearing) will contain time zone information according to ISO 8601 standard and will show millisecond information (Format: yyyy-mm-ddThh:mm:ss.sss ±hh:mm)
- Enhancement of the message flow in the context of a Clearer change process (transactions with old CM will be moved to status “TERMINATED”, new transactions will be generated in status “VERIFIED” with the new CM)
- Further minor changes in reports (e.g. XML tags which have no data will now be displayed, but populated with an empty string)
- Certain reports (CD201, CC203, CC222) will be distributed after midnight
- The OTC GUI will be extended with a new (third) line in the “Authorization required” section. It will be possible to see the pending authorization for the netting parameters
- Prisma Margin Calculator Interface and Eurex Clearing FpML Interface will be enhanced to support a heartbeat functionality (ping request to check the connection)



EurexOTC Clear Release 8.1/9.0

Service enhancements for OTC IRS and OTC Currency Products

- Technical preparation (e.g. additional fields in reports) to support client clearing for OTC Currency Products. The possibility to offer client clearing is subject to regulatory approval
- All FX products (FX Spot, FX Forward and FX Swap) will be made eligible for netting. Trades with fee will be excluded

Outlook EurexOTC Clear Release 9.0

- Eurex Clearing plans to introduce new currency pairs for OTC Currency Products
- Trade compression services for OTC Currency Products
- Further service adjustments and adjustments to reports and FpML messages are expected (Scope items not final and currently in review)

Agenda

- Roadmap 2018
 - Introduction
 - Eurex Clearing's C7
 - Eurex Clearing Prisma
 - EurexOTC Clear

Eurex Clearing's Securities CCP

Eurex Clearing's Securities CCP Release 15.0 and 16.0

Outlook

With CCP Release 15.0, Eurex Clearing will decommission the shaping of T2S deliveries resulting from ETD and FWB trades and introduce further internal enhancements to its CCP Securities Lending offering.

With CCP Release 16.0, Eurex Clearing changes the processing after unsuccessful buy-ins in T2S instruments.

- Currently, those pending delivery obligations remain technically blocked after an unsuccessful buy-in attempt. They cannot be manually released by the member and must wait until the next NTS run.
- With CCP 16.0, members will be able to release such delivery positions. This will allow potential settlements during any of the intraday settlement runs.

CCP Report enhancements on 23 July 2018

Introduction of an additional reporting run

- Eurex Clearing will introduce a new reporting run between CORPT5 and CORPT6 runs due to increased volume of settlements between 2:30 pm and 4:45 pm CET.
- Eurex Clearing expects that participants will have to adapt their internal processing of intra-day CCP Reports (i.e. CE270, TC755) in order to accommodate new timings and the additional run.

Current Reporting Run Setup:

Run No.	Run Timing
1	05:30:00
2	08:30:00
3	11:00:00
4	12:30:00
5	14:30:00
6	16:45:00
7	19:00:00
10	21:45:00
11	01:00:00

Future Reporting Run Setup:

Run No.	Run Timing	Changes
1	05:30:00	No change
2	08:30:00	No change
3	11:00:00	No change
4	12:30:00	No change
5	14:30:00	No change
6	16:00:00	Change in run timing from 16:45 to 16:00
7	16:45:00	Change in run timing from 19:00 to 16:45
8	19:00:00	Enable run at 19:00
10	21:45:00	No change
11	01:00:00	No change

- The changes will be activated on Tuesday, 26 June in simulation and Monday, 23 July 2018 production.

Eurex Clearing Roadmap

Key contacts

Market Readiness & Projects

Hina Toscano Jimenez +49 (0) 69 2 11-1 38 23
hina.toscano.jimenez@eurexclearing.com

Andreas Pee +49 (0) 69 2 11-1 86 55
andreas.pee@eurexclearing.com

Stefan Krause +49 (0) 69 2 11-1 9610
stefan.krause@eurexclearing.com

Thomas Wilczewski +49 (0) 69 2 11-1 6836
thomas.wilczewski@eurexclearing.com



Appendix: Eurex Clearing's C7 Enhancements

Gross position keeping on M-Accounts

	P or A accounts	Market Maker M1&M2 Accounts	Market Maker M1&M2 Accounts
Maintenance Events	Gross	Continuous Net	Gross (EOD Auto Close Out)
Text Adjustment	Yes	Yes	Yes
Transaction Separation	Yes	Yes	Yes
Open / Close Adjustment	Yes	No (n.a.)	Yes
Average Pricing	Yes	Yes	Yes
Give Up	Yes	No	Yes, exception: - Quotes
Take Up	Yes	Yes	Yes
Transaction Account Transfer (from)	Yes	Yes, exceptions: - Quotes - insufficient positions	Yes, exception: - Quotes
Transaction Account Transfer (To)	Yes	No	Yes
External Position Transfer - member triggered (From)	Yes	No	Yes
External Position Transfer - member triggered (To)	Yes	No	Yes
Internal Position Transfer - member triggered (From)	Yes	Yes	Yes
Internal Position Transfer - member triggered (To)	Yes	Yes	Yes
Manual Exercise	Yes	Yes	Yes
Notification	Yes	Yes	Yes
Position Close Out options	- Auto Close Out - File upload - Manual	- N.A. (net position keeping)	- Auto Close Out (default) - Technically possible: - File upload - Manual
Late Closing Fees	Yes	- N.A. (net position keeping)	Yes

The proposed solution is subject to discussions with the trading community and the Exchange Council.



www.eurexgroup.com

© Eurex 2018

Deutsche Börse AG (DBAG), Clearstream Banking AG (Clearstream), Eurex Frankfurt AG, Eurex Clearing AG (Eurex Clearing) as well as Eurex Repo GmbH (Eurex Repo) are corporate entities and are registered under German law. Eurex Zürich AG is a corporate entity and is registered under Swiss law. Clearstream Banking S.A. is a corporate entity and is registered under Luxembourg law. U.S. Exchange Holdings, Inc. and International Securities Exchange Holdings, Inc. (ISE) are corporate entities and are registered under U.S. American law. Eurex Frankfurt AG (Eurex) is the administrating and operating institution of Eurex Deutschland. Eurex Deutschland and Eurex Zürich AG are in the following referred to as the "Eurex Exchanges".

All intellectual property, proprietary and other rights and interests in this publication and the subject matter hereof (other than certain trademarks and service marks listed below) are owned by DBAG and its affiliates and subsidiaries including, without limitation, all patent, registered design, copyright, trademark and service mark rights. While reasonable care has been taken in the preparation of this publication to provide details that are accurate and not misleading at the time of publication DBAG, Clearstream, Eurex, Eurex Clearing, Eurex Repo as well as the Eurex Exchanges and their respective servants and agents (a) do not make any representations or warranties regarding the information contained herein, whether express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose or any warranty with respect to the accuracy, correctness, quality, completeness or timeliness of such information, and (b) shall not be responsible or liable for any third party's use of any information contained herein under any circumstances, including, without limitation, in connection with actual trading or otherwise or for any errors or omissions contained in this publication.

This publication is published for information purposes only and shall not constitute investment advice respectively does not constitute an offer, solicitation or recommendation to acquire or dispose of any investment or to engage in any other transaction. This publication is not intended for solicitation purposes but only for use as general information. All descriptions, examples and calculations contained in this publication are for illustrative purposes only.

Eurex and Eurex Clearing offer services directly to members of the Eurex exchanges respectively to clearing members of Eurex Clearing. Those who desire to trade any products available on the Eurex market or who desire to offer and sell any such products to others or who desire to possess a clearing license of Eurex Clearing in order to participate in the clearing process provided by Eurex Clearing, should consider legal and regulatory requirements of those jurisdictions relevant to them, as well as the risks associated with such products, before doing so.

Eurex derivatives (other than EURO STOXX 50® Index Futures contracts, EURO STOXX® Select Dividend 30 Index Futures contracts, STOXX® Europe 50 Index Futures contracts, STOXX® Europe 600 Index Futures contracts, STOXX® Europe Large/Mid/Small 200 Index Futures contracts, EURO STOXX® Banks Futures contracts, STOXX® Europe 600 Banks/Industrial Goods & Services/Insurance/Media/Personal & Household Goods/Travel & Leisure/Utilities Futures contracts, Dow Jones Global Titans 50 IndexSM Futures contracts, DAX® Futures contracts, MDAX® Futures contracts, TecDAX® Futures contracts, SMIM® Futures contracts, SLI Swiss Leader Index® Futures contracts, Eurex inflation/commodity/weather/property and interest rate derivatives) are currently not available for offer, sale or trading in the United States or by United States persons.

Trademarks and Service Marks

Buxl®, DAX®, DivDAX®, eb.rexx®, Eurex®, Eurex Repo®, Eurex Strategy WizardSM, Euro GC Pooling®, FDAX®, FWB®, GC Pooling®, GCPI®, MDAX®, ODAX®, SDAX®, TecDAX®, USD GC Pooling®, VDAX®, VDAX-NEW® and Xetra® are registered trademarks of DBAG.

Phelix Base® and Phelix Peak® are registered trademarks of European Energy Exchange AG (EEX).

The service marks MSCI Russia and MSCI Japan are the exclusive property of MSCI Barra.

iTraxx® is a registered trademark of International Index Company Limited (IIC) and has been licensed for the use by Eurex. IIC does not approve, endorse or recommend Eurex or iTraxx® Europe 5-year Index Futures, iTraxx® Europe HiVol 5-year Index Futures and iTraxx® Europe Crossover 5-year Index Futures.

Eurex is solely responsible for the creation of the Eurex iTraxx® Credit Futures contracts, their trading and market surveillance. ISDA® neither sponsors nor endorses the product's use. ISDA® is a registered trademark of the International Swaps and Derivatives Association, Inc.

IPD UK Annual All Property Index is a registered trademark of Investment Property Databank Ltd. IPD and has been licensed for the use by Eurex for derivatives.

SLI®, SMI® and SMIM® are registered trademarks of SIX Swiss Exchange AG.

The STOXX® indexes, the data included therein and the trademarks used in the index names are the intellectual property of STOXX Limited and/or its licensors. Eurex derivatives based on the STOXX® indexes are in no way sponsored, endorsed, sold or promoted by STOXX and its licensors and neither STOXX nor its licensors shall have any liability with respect thereto.

Dow Jones, Dow Jones Global Titans 50 IndexSM and Dow Jones Sector Titans IndexesSM are service marks of Dow Jones & Company, Inc. Dow Jones-UBS Commodity IndexSM and any related sub-indexes are service marks of Dow Jones & Company, Inc. and UBS AG. All derivatives based on these indexes are not sponsored, endorsed, sold or promoted by Dow Jones & Company, Inc. or UBS AG, and neither party makes any representation regarding the advisability of trading or of investing in such products.

All references to London Gold and Silver Fixing prices are used with the permission of The London Gold Market Fixing Limited as well as The London Silver Market Fixing Limited, which for the avoidance of doubt has no involvement with and accepts no responsibility whatsoever for the underlying product to which the Fixing prices may be referenced.

PCS® and Property Claim Services® are registered trademarks of ISO Services, Inc.

Korea Exchange, KRX, KOSPI and KOSPI 200 are registered trademarks of Korea Exchange Inc.

BSE and SENSEX are trademarks/service marks of Bombay Stock Exchange (BSE) and all rights accruing from the same, statutory or otherwise, wholly vest with BSE. Any violation of the above would constitute an offence under the laws of India and international treaties governing the same.

The names of other companies and third party products may be trademarks or service marks of their respective owners.



www.eurexgroup.com

Thank you for your attention!



Eurex Exchange / European Energy Exchange / Eurex Clearing / Eurex Repo