Eurex Exchange Roadmap 2017

Welcome to the Eurex Roadshow!

September 2017



Presentation Overview

Part I — Trading participant requirements to provide reference data	Slides 3 – 16
Part II - T7 R6.0 MiFID II / MiFIR compliance release	Slides 17 – 44
Part III – New Eurex RFQ Platform	Slides 45 – 52
Part IV – Update Thirds Country Firms (TCFs)	Slides 53 – 57



Eurex Exchange Roadmap 2017

Part I – Trading participant requirements to provide reference data

September 2017



Agenda – Part I

- 1. Introduction participant reference data and enhancement of order records
- 2. Provisioning of the Legal Entity Identifier (LEI)
- 3. Provisioning of National IDs of traders of Eurex trading participants
- 4. Certification of algorithms applied via Algo IDs
- 5. Provisioning of Short Codes for client identification codes
- 6. Provisioning of Short Codes for execution and investment decision
- 7. Due Diligence requirements
- 8. Overview of the process flow



Introduction

The regulatory changes of the revised Markets in Financial Instruments Directive (MiFID II) and the associated Markets in Financial Instruments Regulation (MiFIR) will come into effect on 3 January 2018.

- Eurex is required to collect additional reference data from its participants.
- In addition, Eurex shall conduct an annual due diligence assessment of its participants to verify once a year if the participants are still registered as investment firms.

With this presentation Eurex wants to inform about the impact for participants resulting from these requirements.



Participant reference data and enhancement of order records

As a trading venue, Eurex is required to store and keep at the disposal of the National Competent Authority (NCA) the following data (among others):

Legal Entity Identifier (LEI)



- Identification of the member of the trading venue.
- Identification of immediate clients of the member that are legal entities.

National ID



- Identification of the persons acting for the member on the trading venue.
- Identification of immediate clients of the member that are natural persons.

Algo ID



Certification of the participant's algorithms to avoid disorderly trading conditions.

Short codes



For identification of clients, and for execution decision and investment decision.

Eurex aims to minimize the impact on participants by limiting the impact on the existing order/quote message formats.



Legal Entity Identifier

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Art. 25(2) of Regulation (EU) No 600/2014 and RTS 24, Eurex shall keep at the disposal of the competent authority the relevant data to identify the participant of the trading venue.

General Format

- LEIs are used to uniquely identify legally distinct entities that engage in financial transactions
- LEIs are issued by "Local Operating Units" (LOUs) of the Global LEI System (for more information on how to obtain an LEI, please visit http://www.leiroc.org/lei/how.htm and http://www.geiportal.org/)
- The Legal Entity Identifier (LEI), as defined in ISO 17442, contains 20 alphanumerical characters

Submission Method

 The Central Coordinator of each Eurex Trading Participant can provide and update the Participant LEI in the "Member Section" under "User Administration"

Submission Deadline

- Eurex participants must provide their LEIs latest 01 December 2017 to ensure a smooth readiness
- Since LEIs must be renewed by LOUs annually, participants shall assure the renewal of members' LEI in their compliance / business processes

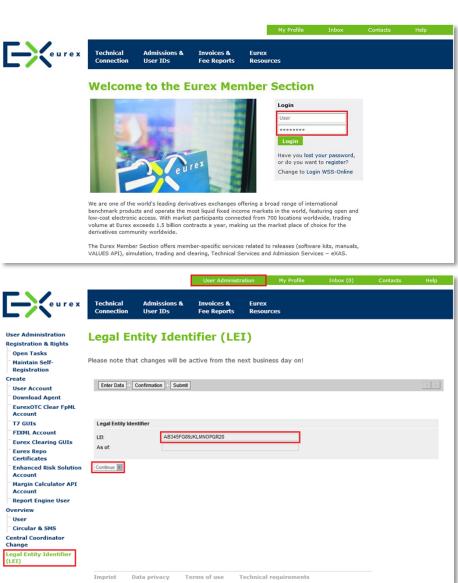


Legal Entity Identifier – How and where to enter it

- Please login with your username and your password to the Eurex Member Section.
- (<u>https://member.eurexchange.com/irj/portal/eurexchange</u>)

- Then select "User Administration" on the top row. Please click on "Legal Entity Identifier (LEI)" in the navigation area.
- Please enter the valid LEI code and click on "Continue" to confirm the code and submit.





National ID of traders of Eurex participants

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Art. 25(2) of Regulation (EU) No. 600/2014 and RTS 24, Eurex shall keep at the disposal of the competent authority the relevant data to identify the person within the trading participant of the trading venue who is primarily responsible for the investment decision or primarily responsible for the execution of the transaction.

General Format

The National ID requires joining the country code standard ISO-3166-1 of the nationality of the person

- For the majority of EU countries one of the required identifiers is the CONCAT* ID, which is a concatenation of the following elements
 - A) date of birth of the person
 - B) first five characters of the first name
 - C) first five characters of the surname
- The highest priority identifier available to the participants must be used in accordance with the priority levels provided in the table

Submission Method

- For existing traders, the Central Coordinator will frequently receive a list of all traders that have not provided a National ID.
 Participants can then submit the National ID via a bulk upload in the Member Section from 18 September onwards.
- For new traders in admission, an participants can provide the National ID via the Member Section "Admission & User IDs" already.

Submission Deadline

- Eurex participants should provide the National IDs of all their admitted traders latest by 1 December 2017 to ensure a smooth readiness.
- Traders admitted after this date need to provide their National ID to successfully complete the admission process.
- On the 3 April 2017 ESMA published the standards and formats for the National ID (Ref.: ESMA70-1861941480-56)

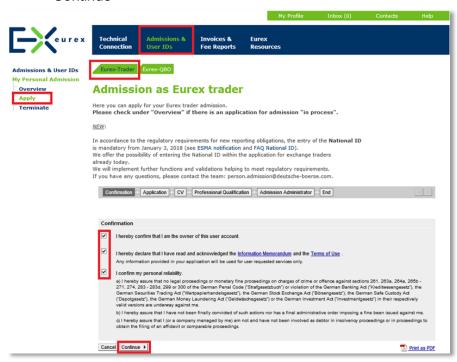


^{*} For more details about CONCAT, please see ESMA/2016/1452, chapter 5.5

National ID – How and where to enter it

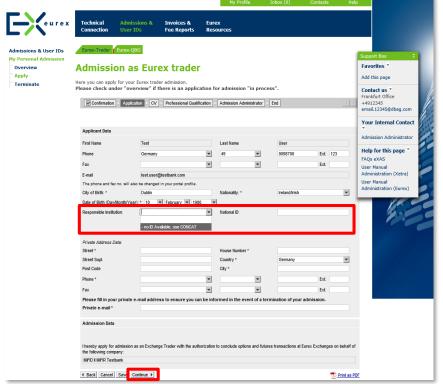
Please login to the Member Section and go to "Admissions & User IDs".

- Click on "Apply" in the navigation and choose the structure "Eurex-Trader"
- If all three ticks in the boxes are set, please click on "Continue"



Please enter your National ID besides all other required information.

- After selecting the responsible Eurex trading participant/ person (in this case CONCAT), the system will automatically generate the CONCAT for you.
- Please enter all the other requested information and click on "Continue" to continue the admission process.





Certification of algorithms applied via Algo IDs

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Under Art. 25(2) of Regulation (EU) No 600/2014 and RTS 24, Eurex shall keep at the disposal of the competent authority the relevant data to identify the algorithm that is within the participant of the trading venue primarily responsible for the investment decision or primarily responsible for the execution of a transaction.

Participants must certify that all deployed algorithms have successfully passed the testing requirements imposed by MiFID II regulation. The algorithm certification should contain the Algo ID of the algorithm that was tested and the name of the trading participant that would like to have the algorithm registered at Eurex. For testing, the standard simulation T7 Cloud Simulation as well as member internal test environment can be used.

General Format

- Participants shall create certificates and upload them via the member section.
- The details of the file format used for the upload are currently elaborated by the FIX community. Eurex's implementation will follow the FIX standards.
- 8-byte numeric identifier

Submission Method

- Eurex plans to offer an upload functionality for algorithm certificates within the Eurex member section by 18 September 2017.
- Trading participants will be able to upload the certificates in bulk or single transactions.

Submission Deadline

- Eurex participants should upload their certificates latest 1 December 2017 to ensure a smooth readiness.
- Each Algo ID used must have a certificate.
- Certificates for new algorithms must be uploaded before 23:30 h CET of day T.
- Eurex will provide a report for missing/ not certified Algo IDs.



Short Codes

a) For client identification codes

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Under Art. 25(2) of Regulation (EU) No 600/2014 and Art. 2 of RTS 24, Eurex shall keep at the disposal of the competent authority the relevant data to identify the client of the trading participant of the trading venue.

There are five possibilities for the population of field 3 "client identification code" of table 2 of the RTS 24 annex:

- 1. When the client is a legal entitiy, the LEI code of the client
- 2. When the client is not a legal entitiy, the National ID of the client
- 3. In case of an aggregated order, the flag AGGR
- 4. In case of pending allocations, the flag PNAL
- 5. The field should be left blank only if the trading participant is trading on own account
- b) For execution decision (mandatory) and investment decision (optional)

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As set out in Article 2(1)(b) of RTS 24, the field "investment decision" should always be populated when the participant is dealing on own account since it is putting its books at risk.

The execution decision field should be populated in every transaction report. In cases where the decision about the execution was made

- By a client
- By a person within the participant firm (either an admitted trader or another non-admitted person who is instructed the details for the execution



Short Codes – How and where to enter them

Submission Method

- Trading participants will be able to upload the short codes and according National IDs or LEIs in bulk or as single transactions in the member section.
- Details regarding the file formats used for the upload are currently elaborated by the FIX trading community. The Eurex implementation will follow the FIX standards.
- It is currently purposed to use the following standard short codes:
 - 0 = no client for this order
 - 1 = aggregated order flag "AGGR"
 - 2 = pending allocations flag "PNAL"
 - 3 = Client
- Eurex plans to offer an upload functionality for short codes within the Eurex Member Section by 18 September 2017.
- Trading participants will be able to upload the short codes in bulk or single transactions.

Submission Deadline

- Eurex has to be provided with the short codes and corresponding long codes in the relevant identifier (National ID and LEI) before 23:30 CET of day T.
- If a participant fails to provide the decrypted ID for a short code submitted by the end of day T, Eurex will inform the participant accordingly on the next trading day. The participant must ensure to complete missing data at the latest next trading day (T + 1) before 23:30 h.



Due Diligence requirements

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According to Art. 48(1) of Directive 2014/65/EU and Art. 7 of RTS 7, each year Eurex is required to conduct a risk based assessment of its participants and check if the participants are registered as investment firms.

General Format

Participants will receive a due diligence questionnaire that contains questions covering the following areas:

- Pre-trade controls on price, volume and value of orders and usage of the system and post-trade controls on the trading activities of the participants
- 2. Qualifications required on staff in key positions within the participant
- 3. Technical and functional conformance testing
- 4. Policy of use of the kill functionality
- Registration as an "investment firm" as defined in Art. 4(1) or 2014/65/EU
- 6. Provisions on whether the participant may give its own clients direct electronic access to the system and if so, the conditions are applicable to those clients
- 7. Whether the client is subject to MiFID II and MiFIR

Submission Method

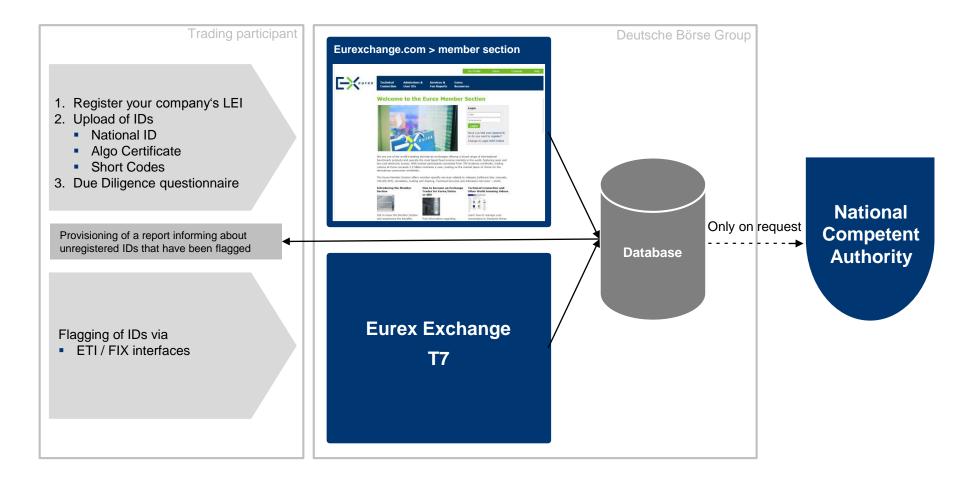
- Eurex plans to make the questionnaire available in the member section starting 18 September 2017.
- Participants shall fill in the questionnaire and upload it into the member section.
- Participants are obliged to fill the questionnaire at least once a year.

Submission Deadline

- Existing trading participants need to complete the questionnaire by January 2019 for the first time.
- New participants, admitted after 31 December 2017, need to provide the required information upon admission.

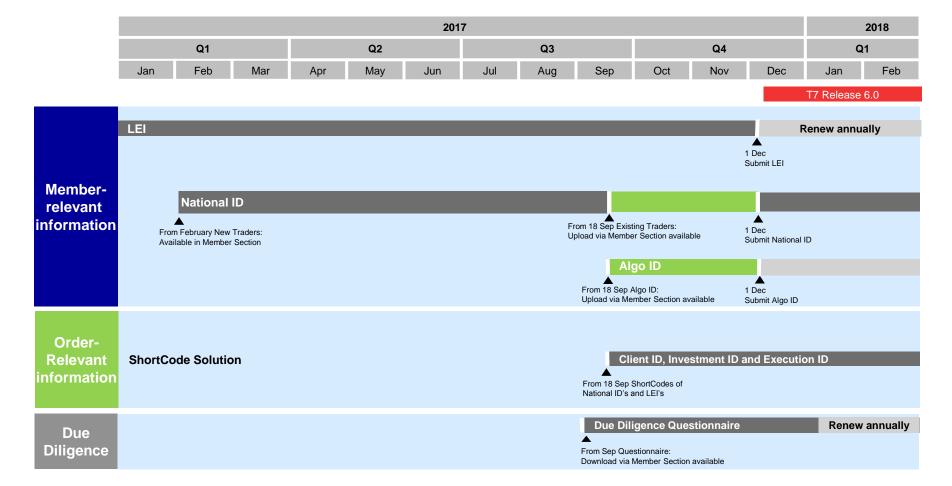


Process flow





Implementation & rollout plan – non-release items





Eurex Exchange Roadmap 2017

Part II - T7 R6.0 - The MiFID II / MiFIR compliance release

September 2017



Agenda – Part II

- Overview of T7 Release 6.0
- Rollout and implementation planning
- 3. Implementation and communication schedule
- 4. MiFID II Regulatory Requirements
- 5. Technical enhancement regarding First-In-First-Out Gateways
- 6. T7 Enhancements for the Derivatives Markets
- 7. Reports
- 8. Process flow
- 9. Update Communication
- 10. Contacts



Overview T7 Release 6.0 for Eurex

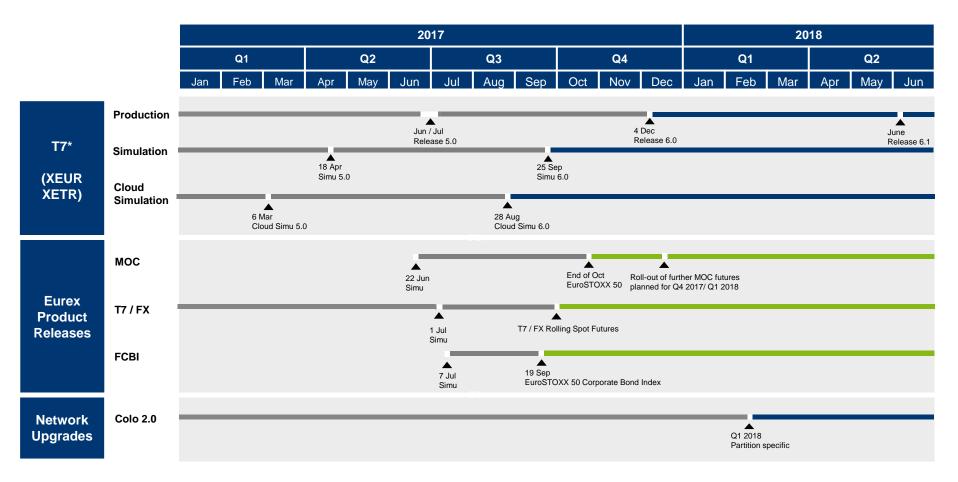
- T7 Release 6.0 is planned to be launched on **4 December 2017**. The simulation period for T7 Release 6.0 is currently planned to start on 25 September 2017.
- This document provides an overview of the enhancements planned for T7 Release 6.0, including:
 - MiFID II regulatory requirements
 - Technical enhancement regarding First-In-First-Out (FIFO) Gateways
 - For Eurex:
 - A new RFQ-based platfrom
 - Entry of leg trade prices for TES trades in complex instruments
 - Initial boundary price based on settlement price and quote spreads
 - Delta validation for option volatility strategies

Please note that the introduced enhancements and new functionalities are not backward compatible.

The documents will be available on the Eurex website: www.eurexchange.com Technology > Eurex Exchange's T7 > System Documentation > Release 6.0

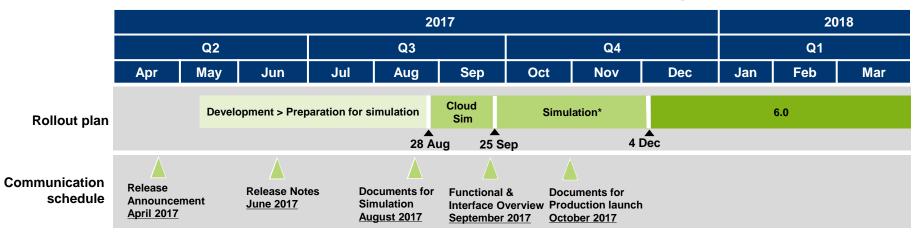


Roadmap update – Project overview





T7 6.0 Rollout and implementation planning



- Deutsche Börse AG will provide a dedicated release simulation environment in order to give trading participants the opportunity to perform comprehensive testing of their trading applications, independent from the T7 production environment. The simulation period for T7 Release 6.0 is currently planned to start on 25 September 2017.
- In addition to T7's release simulation, participants can also use the T7 Cloud Simulation that allows trading participants and Independent Software Vendors (ISVs) to test against the current T7 production environment as well as the T7 R.6.0 version.
- In this environment participants can initiate predefined market scenarios and test specific strategies more easily than in a shared environment.
- The T7 Cloud simulation is available 24/7 for a fixed price per hour and is accessible using an SSL-encrypted internet connection.
- In June 2017, Eurex will publish detailed release notes listing all functional and technical enhancements that will be available in T7 Release 6.0.

^{*} For more information on the T7 Cloud Simulation please refer to http://www.eurexchange.com/exchange-en/technology/t7-cloud-simulation or for Xetra: http://www.xetra.com/xetra-en/technology/t7/cloud-simulation.



Implementation and communication schedule

T7 D 1 0 0	,	peu		Q1 2017		7	Q2 2017			Q3 2017			Q4 2017			
7 Release 6.0	Eurex	Eurex	Xetra	Combined	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Release Notes																
T7 Release 6.0, Release Notes	х	x							•							
Simulation																
Participant Simulation Guide	х	х														
Overview and Functionality																
T7 Functional and Interface Overview			x													
T7 Functional Reference			x													
Participant and User Maintenance Manual	х	х														
GUI Solutions																
Trader, Admin and Clearer GUI – Manual	Х	х														
T7 Trader, Admin and Clearer GUI - Installation Manual			X													
Trading Interfaces																
T7 Enhanced Trading Interface – Manual incl. Repository & Header files			x													
T7 Enhanced Trading Interface – XML Representation			х													
T7 FIX Gateway - FIX 4.2 and 4.4 Manual incl. Fiximate and Repository			х													
Market and Reference Data Interfaces																
T7 Market-, Enhanced Order Book- and Reference Data Interfaces,			X													
Manual incl. Fast Message Template and Repository			^								_					
Reference Data File – FIXML Schema Files	х	х														
Xetra Instrument Reference Data Guide		Х														
T7 Extended Market Data Services – Manual incl. Fast Message			x													
Template and Underlying Ticker Data			^													
Reports																
XML Reports - Reference Manual	Х	X														
Common Report Engine User Guide			Х													
Network Access																
Network Access Guide			Х													
Rules & Regulations																
Rules & Regulations Update	X	X														



preliminary versions

simulation versions

final versions

General Overview

In order to satisfy the regulatory MiFID II/ MiFIR requirements, which will be effective from **3 January 2018**, Eurex introduces several enhancements with T7 6.0.

Pre-trade Controls

Order price check, maximum order value, maximum order quantity (according to RTS 7 Art. 20).

Market making

Handling (RTS 8 for ESMA*/2015/1464).

Pre-trade and post-trade transparency

Provision (RTS 1 and 2).

Audit trail reporting

 Several new fields (for example CliendID for custormer identification) are introduced to provide the necessary input for the Audit Trail Reporting required by ESMA* (RTS 24).



Pre-trade and post-trade controls

RTS 7 Art. 20 - Article 48(4) and (6) of Directive 2014/65/EU	Eurex Orderbook and TES
Trading venues shall operate at least the following pre- trade controls adapted for each financial instruments traded on them:	
Price collars/ order price check , which automatically block orders that do not meet pre-set price parameters on an order-by-order basis.	The requirement for price collar check is covered by the Price reasonability check and extended price range functionalities .
Maximum order quantity , which prevents orders with an uncommonly large order size from entering the order book.	The requirement for maximum order quantity is covered by the User transaction size limit functionality (which is maximum order quantity, maximum TES quantity and maximum calendar spread quantity).
Maximum order value , which prevents orders with uncommonly large order values from entering the order book by reference to notional values per financial instrument.	TES (Trade Entry Services) is considered as business outside the order book. Requirements that only apply for on-book trading are not relevant for TES. Maximum order value check will not apply to Eurex TES.



MiFID II Regulatory Requirements

Pre-trade and post-trade controls – further reading

Functional requirements overview

Price collars

- The pre-trade controls rule regarding price collars has to automatically block orders that do not meet pre-set price parameters when comparing the order price with a reference price.
- The price collar requirement as well as the "Skip flag" functionality is already fulfilled with the existing price reasonability check and extended price range validation functionalities in T7 which will be activated for all Eurex products.

Maximum order quantity

- The pre-trade control rule regarding maximum order quantity has to automatically block orders that do not meet pre-set maximum order quantity limits by the participant for their users.
- The order quantity is defined as following: The total order quantity respectively the modified total order quantity will be the order quantity and validated against the maximum order quantity. Any previously matched partial execution will not be taken into account.
- Plain limit or market orders will be validated with the respective order quantity.
- Iceberg orders will be validated with the full order quantity when entering the order book, refills of iceberg orders are not treated as new orders or order modification and therefore not be validated again.
- Volume discovery orders will be validated with the full order quantity.
- The maintenance of the maximum order quantity by the participant can be done at any time, besides the roll over process of the reference data base.
- Taken the various partner exchanges of T7 into account, executing the pre-trade control rule regarding maximum order quantity will be controlled via a new field in the market parameter entity

Maximum order value

- The pre-trade controls rule regarding maximum order value has to automatically block orders that do not meet pre-set maximum order value limits by the participant. This is to avoid uncommonly large orders (in Euro) from entering the order book.
- Executing the pre-trade control rule regarding maximum order value will be controlled via a new field in the market parameter entity.
- The "skip flag" functionality (also known as "opt-out") will be implemented. On request of the participant, the maximum order value check will not be executed.



Pre-trade and post-trade controls

Impact on implementation

T7 Admin GUI

• Participants have to have the possibility to maintain the maximum order quantity and the maximum order value limits in T7 in the member admin GUI.

T7 Trader GUI

- Order entries via GUI in T7 are applicable to pre-trade controls.
- Validation of orders entered via GUI regarding maximum order value and maximum order quantity will be done in matching engine. There will be no "skip flags" available.
- No changes in GUI required.

ETI & FIX Gateway

• The "skip flag" functionality for maximum order quantity and maximum order value will be implemented in the same manner as the price validity check.



MiFID II Regulatory Requirements

Market Making – Overview

RTS 8 for ESMA*/ - Annex I (2015/1464/EU)

- Market making obligation flag for liquid financial instruments that are defined by ESMA*.
- Liquidity Provision Indicator in order and quote maintenance requests for market makers to mark their orders and quotes for the purpose of liquidity provision.
- Introduction of Stressed Market Conditions based on the market conditions in an instrument, under which relaxed obligations for market making apply.
- Introduction of Exceptional Market Conditions, which have a major impact on the trading environment and under which obligations for market making do not apply.
- With effect from January 3, 2018 MiFID II requires that investment firms that pursue a market making strategy have to sign a market making agreement and are obliged to meet requirements as defined by the trading venue.
- For providing liquidity in stressed markets, investment firms will be rewarded for the additional risk they undergo through the market maker scheme a trading venue shall offer in liquid equity instruments.
- Trading venues are required to communicate the existence of such stressed market conditions and exceptional circumstances to all market participants.
- Market makers are required to flag orders and quotes which are submitted to the trading venue with a corresponding liquidity provision flag in order to distinguish them from other order flows.
- Since orders can also be used for Market Making strategies the new flag is required in all order and quote entry requests via all trading interfaces.



MiFID II Regulatory Requirements

Market Making – Obligation & Market Conditions

Market Making Obligation

- T7 provides a corresponding MM obligation flag on product level in the T7 reference data.
- Liquid instruments (and) according market making obligations are described in RTS 8 article 5(1).

Stressed Market Conditions (SMC)

- SMC correspond to stressed trading conditions.
- SMC is defined in terms of significant short-term changes of price and volume (RTS 8 Art. 6 (2)) and are detected based on the market conditions in an instrument.
- In derivative markets, SMC can be detected in simple instruments only, with effect on all instruments of the concerned product.

Exceptional Market Conditions (EMC)

- EMC refer to a major impact on the trading environment caused by some unplanned event (list of causes RTS 8 Art. 3).
- Typically, exceptional circumstances affect all instruments in a market; for derivative markets exceptional circumstances may affect only a specific product.
- The start and the end of EMC are displayed on the GUI and forwarded to the webpage of the affected trading venue.

Liquidity Provision Indicator

- T7 is enhanced with a liquidity provision indicator in order and quote maintenance requests and TES trading requests.
- The liquidity provision flag refers to RTS 8 article 2.



Market Making – Reference Data

Market making obligation - New Attribute RegMMO

- The attribute RegMMO (denoted as MM obligation flag for derivative products) denotes whether a
 derivative product is subject to market making obligation based on regulatory requirements.
- RegMMO can only be set to True if the concerned product is associated with a legal product group which is eligible for SMC detection.

Stressed Market Conditions (SMC)

 Note that some trading parameters which are currently for usage in fast market conditions only, will also be applied in automated stressed market conditions

Reference Data Files for Publication

The product and instrument files are enhanced as follows:

- New flag for the SMC eligibility of a product (IsSMCEligible)
 The flag is set according to the associated legal product group of a product and is added to the table of trading parameters in the section for market making parameters.
- New flag for the regulatory MM obligation of a product (MM obligation flag)
 The flag is added to the table of trading parameters in the section for market making parameters.



Market Making – Trading Interface Enhancements

The following ETI messages and corresponding FIX messages are enhanced with a new attribute for the liquidity provision indicator.

Orderbook trading (ETI & FIX)	TES (only available via ETI)					
Liquidity Provision Indicator (as optional) in:	Liquidity Provision Indicator (as optional) in:					
New Order Single (short and regular layout)New Order Multi Leg	 Enter TES Trade The liquidity provision indicator is provided per TES trade side. 					
 Mass Quote The liquidity provision indicator is available once per request and applies to all quotes in the request. 	 Modify TES Trade The liquidity provision indicator is provided per TES trade side. TES Broadcast 					
 Replace Order Single (short and regular layout) 	The liquidity provision indicator is provided per TES trade side.					
 Replace Order Multi Leg Extended Order Information (this applies to ETI only) The liquidity provision indicator is shown for the retransmissions of order events. 	Approve TES TradeApprove TES Trade Broadcast					
	 Upload TES Trade The liquidity provision indicator is provided per TES trade side. 					
	 TES Trade Upload Broadcast The liquidity provision indicator is provided per TES trade side. 					



MiFID II Regulatory Requirements

Market Making - Market Data Interface Enhancements

Changes of messages

Instrument State Change

- The message is enhanced with an indicator for the SMC-Auto status.
- The existing fast market indicator is redundant for Eurex.

Mass Instrument State Change

The message is enhanced with an indicator for the SMC-Auto status.

Depth Snapshot Message

- The message is enhanced with an indicator for the SMC-Auto status.
- The message is enhanced with an indicator for the SMC-Fast status.
- The existing fast market indicator is redundant for derivative markets.

Product State Change

- The message is enhanced with indicators for the SMC-Auto status and for the SMC-Fast status.
- The SMC-Auto status originates from any instrument of the concerned product.
- The existing fast market indicator is redundant for derivative markets.
- Note that in derivate markets, the SMC-Auto status indicator will change simultaneously for all instruments of a product at a time.



Market Making - Reference Data Interface Enhancements

Stressed Market Conditions Market Making Obligation The product snapshot message is enhanced to show The product snapshot message is enhanced to indicate the MM obligation flag as additional product (market that the applicable minimum quote quantity (bid and offer segment) attribute. in quote size rules) is adapted in stressed market conditions, for SMC-Auto and SMC-Fast in the same way. The product snapshot message is enhanced to show the eligibility of automated stressed market conditions The product snapshot message is enhanced to indicate as additional product (market segment) attribute. that the applicable price range tables for the validation of quote spreads in mass quotes and quotes request are adapted in stressed market conditions, for SMC-Auto and SMC-Fast in the same way. The product snapshot message is enhanced to indicate that the applicable price range tables for the price reasonability check and the market order matching range are adapted only in stressed market conditions on fast market (SMC-Fast).

RDF is enhanced accordingly.



Market Making - GUIs

Liquidity Provision Indicator	Stressed Market Conditions
 The enhancements affect the Trader/Admin GUI as follows: New field to enter and display the Liquidity Provision Indicator This affects the following Views: Order Entry TES Trade Entry	The Trader/Admin GUI and are enhanced to additionally display the SMC-Auto status on the following views: Market Contract/Instrument Statistics Product Statistics This applies to derivative markets only. The SMC-Auto status of a derivative product corresponds to the SMC-Auto status of any of its instruments.



Pre-trade transparency provision

Pre-Trade transparency requirements are referring to order book transparency during Continuous trading and during auctions, the post-trade transparency requirements are focused on the transparent reporting after a transaction.

RTS 2 Functional requirements according to MiFID II	Implementation
RTS 2, Annex I, Table 1 "For each financial instrument, the aggregate number of orders and the volume they represent at each price level, for at least the five best bid and offer price levels."	To meet the requirements for T7 order book, beside of the publication of orders and the volume they represent at each price level, the aggregated order book information needs to be published for at least the five best bid and offer price levels
RTS 2, Annex I, Table 1 "Adequate information as to the level of orders or quotes and of trading interest; in particular, the five best bid and offer price levels and/or two-way quotes of each market maker in the instrument, if the characteristics of the price discovery mechanism so permit."	 For TES trades the T7 system is required to fulfil the criteria's of the large in scale and non-liquid instrument waivers in order not to fall into the obligation of pre-trade transparency. For the non-liquid instrument waiver it is required, that the product is validated as such. For the large in scale (LIS) waiver the minimum block trade size will be set at or above the "large in scale post" threshold.
	Market depth of at least five for all products Add illiquid instrument flag in product, use LIS pre values for Minimum Lot size and LIS post for Non-Disclosure Limit in TES Profile.



Audit trail

Several new fields are introduced in the T7 Audit Trail records to provide the necessary input for the Audit Trail Reporting required by ESMA* (RTS 24).

Investment qualifier and **Execution qualifier** (FIX Adaptation for field 4)

- Investment qualifier data field is used in the specification process of the Investment identifier. Trading
 participants will have the possibility to specify an Investment and Execution qualifier value to distinguish
 between natural persons {National_ID} and Algos {Algo ID}.
- Possible values: 24- Human / Natural person, 22-Algo, {Empty}.

Liquidity provision activity: ESMA Field 8 (Section B)

- This data field has been defined by ESMA as an indication as to whether an order or a quote is submitted to a Trading Venue as part of a market making strategy. It is therefore necessary that such orders, quotes or T7 entry service trades are flagged accordingly to facilitate identification and reporting downstream.
- LiquidityProvisionFlag field will be supported on all orders and quotes maintenance interfaces (ETI; FIX, GUI) and in the order audit trail.



Audit trail – Changes in interfaces

Changes in ETI and FIX

The new data fields:

- Client identifier
- Investment qualifier
- Investment identifier
- Execution qualifier
- Execution identifier
- LiquidityProvisionFlag

are being implemented for the following message\transactions type:

- Order transactions
- Quote transactions
- Mass quote transactions



MiFID II Regulatory Requirements

Audit trail – Changes in interfaces

New Data field name (Internal)	ETI / FIX Name	#	ESMA Data Field	Description / Logic
Client identifier (8-Byte numeric Short Key)	Client identifier (20003)	3	Client Identification Code	New data field (i.e. Client identifier) will be added to the following message type: Order entry (add, modify) Cross request Quote request for message/record.
Investment qualifier (1-Byte field value) Investment identifier (8-Byte numeric Short Key) Execution qualifier (1-Byte field value) Execution identifier (8-Byte numeric Short Key)	Investment qualifier (21222) Investment identifier (20122) Execution qualifier (21112) Execution identifier (20012)	5	Investment decision within firm Execution within firm	New data fields (i.e. Investment identifier Investment qualifier, Execution qualifier Execution identifier) will be added to the following message type: Order entry (add, modify, delete) Cross request Quote request for message / record. Mass quote entry
Liquidity Provision Flag (True or False)	Liquidity provision flag	8	Liquidity provision activity	New data field (i.e. Liquidity Provision Flag) will be added to certain message types



MiFID II Regulatory Requirements

Audit trail – Changes in interfaces

T7 Trader GUI

Specification of the Short Code (Client identifier, Investment identifier, Investment qualifier, Execution qualifier, Execution identifier and LiquidityProvisionFlag). As a new field within the T7 Trader GUI platform, these new fields need to be taken into account for the following windows:

- Order/Quote entry and maintenance
- Fields visibility via the Order Overview windows (own order overview window not relevant).

Market Data Interfaces

Along with parameter matrix, the new data field; IndicativeAuctionVolume, is distributed to the market via the Market Data interface (MDD) based on the rules defined within the matrix.



Technical Enhancements – FIFO Gateways

- With Release 6.0 T7 will implement the so called partition specific (PS) gateway.
- Partition specific gateways will replace the existing high frequency gateways and will allow routing only to a specific partition.
- Sessions may login to only one partition specific gateway at a time and have to specify the partition ID in their initial connection request.
- During a transition period high frequency and partition specific gateways will be offered in parallel.
- Low frequency gateways will stay in place and allow routing to all partitions.



Eurex Exchange Roadmap 2017 September 2017

T7 Enhancements for the Derivatives Markets

Several enhancements relevant for the T7 Derivatives markets are introduced with the new T7 6.0 release:

New RFQ-based Platform

- With the upcoming MiFID II regulation there will be an increased requirement on investment firms to prove Best Execution.
- Eurex wants to provide its members tools to meet these challenges.
- With the new RFQ-based platform the T7 platform is enhanced with a selective Quote Request for platform to negotiate off-book transactions electronically.
- The initial release of the RFQ-based platform is aimed for both Brokers and Market Makers in Fixed Income Options. The service helps to provide all necessary data to prove Best Execution, while also streamlining the current voice driven market.

Entry of Leg Trade Prices for TES Trades in Complex Instruments

- TES trade entry and modification for complex instruments is enhanced to allow the initiating user to enter leg prices.
- The leg trades generated from these TES trades will apply the prefilled prices for the legs.

Initial Boundary Price based on Settlement Price for Quote Spreads

 The price validations for TES trading are enhanced to allow the use of the previous day settlement price as reference price and calculate minimum and maximum price boundaries around it by using quote spreads.

Delta Validation for Option Volatility Strategies

• To prevent the setup of wrongly defined options volatility strategies with respect to their delta neutrality, an optional validation of the delta neutrality of options volatility strategies is introduced with T7 6.0.



Reports

The following new reports are introduced with T7 6.0:

- TE600 Daily "New RFQ-based platform" Maintenance (Derivatives only)
- TE960 Regulatory Market Conditions Maintenance (Cash & Derivatives)
- TR160 Identifier Mapping Error (Cash & Derivatives)
- TR161 Identifier Mapping Status (Cash & Derivatives)

There are changes in the following existing derivatives market reports:

- TE540 Daily Order Maintenance
- TE545 Daily TES Maintenance
- TE550 Open Order Detail
- TE810 T7 Daily Trade Confirmation
- TR900 Daily Order and Quote Transactions

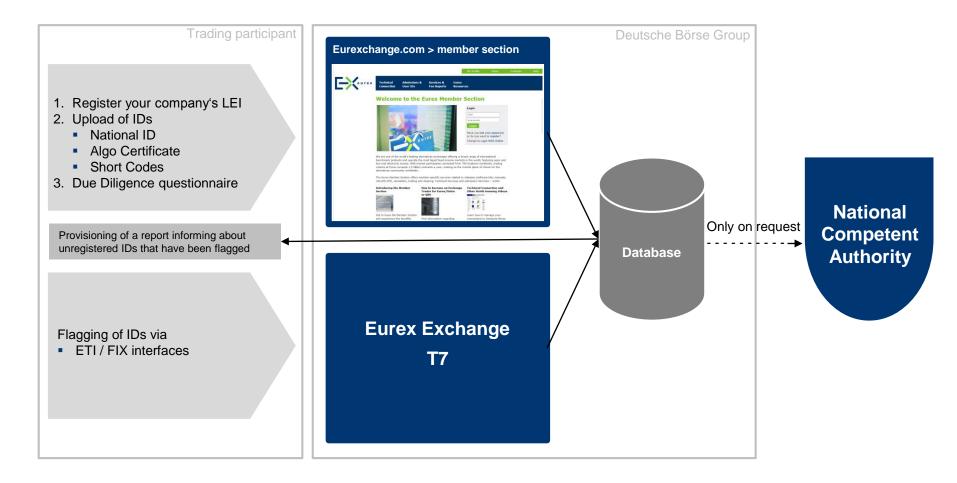
There are changes in the following existing cash market reports:

- TC540 Daily Order Maintenance
- TC550 Open Order Detail
- TC810 Daily Trade Confirmation
- TD930 Daily Trade Statistics

Please note that the list of affected reports might change until the publication of the Release Notes.



Process flow



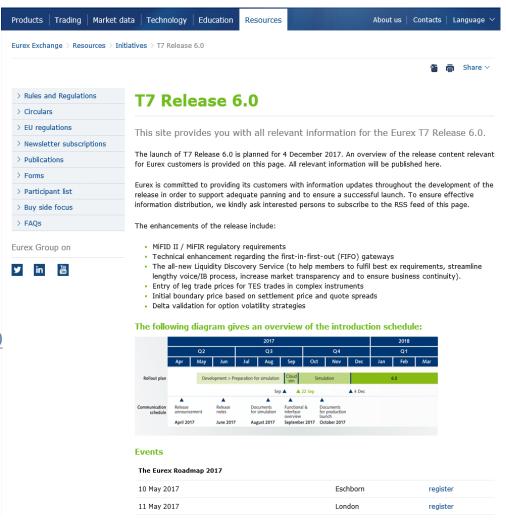


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Update Communication

- A new Eurex Exchange website is now available for T7 Release 6.0 with the related information.
- On this side, all release relevant information will be published, such as
 - General updates
 - Circulars and mailings
 - Specifications
 - Relevant documents
- The link to the webside is as follows:

www.eurexchange.com/initiatives/t7release60





Contacts

Global Key Account Management Trading	Contact
General email support	customer.readiness@eurexchange.com
Key Account Managers	Please use your common contact details

The documents will be available on the Eurex website: www.eurexchange.com Technology > Eurex Exchange's T7 > System Documentation > Release 6.0



Eurex Exchange Roadmap 2017

Part III - New Eurex RFQ Platform

September 2017



Motivation: The Best Execution Challenge for Off-Book Price Formation of ETDs



Requirement to take all <u>sufficient</u> 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.

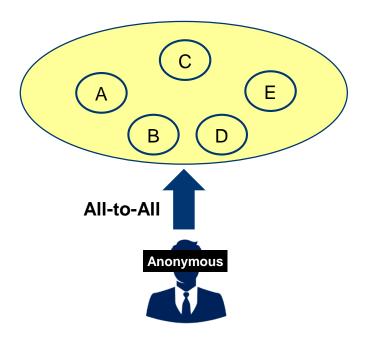
An Electronic, selective RFQ Platform, is our solution to help Members meet this challenge...

MiFID II Directive refferences: * Article 27 par1. ** Article 16/7 par2. *** Article 16/7 par9



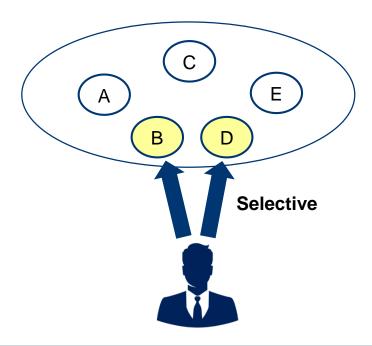
A selective Request For Quote (RFQ) system can cater for customer needs for off-book transactions

Central Order Book



This mechanism lends itself to situations where there is **enough centralised liquidity** to absorb the trading interest efficiently, and with minimal slippage.

Selective RFQ



This mechanism lends itself to situations where there is **not enough centralised liquidity** to absorb the trading interest efficiently. Moreover, increased dissemination of quality of the flow (not anonymous), and reduced leakage (not all-to-all), affords Market Makers the confidence to meet the liquidity needs.



The cornerstones of the new Eurex RFQ platform

Target Market



Off-book ETD business

Target Audience



Broker and Market Maker

Requester



Electronic selective RFQ Platform with STP to Exchange

Targeted Launch Date



December 2017 with Fixed Income Options



Key benefits for our customers at a glance

Best Execution

Best Execution is one of the most onerous aspects of MiFID II for an Investment Firm. It leaves room for interpretation but requires solid data basis.

Eurex makes compliance to this requirement a part of the fundamental design.

Eurex provides all the tools for compliance but allows each Investment Firm to implement its interpretation.

Streamline Voice Process

Voice/chat process is inefficient (series of bi-lateral conversations), increases risk of leakage and makes dispute resolution cumbersome.

Eurex developed the platform to make the work at the desk easier and more efficient.

The platform replicates key voice processes while consolidating responses simultaneously to facilitate quick decisions.

Market Insights

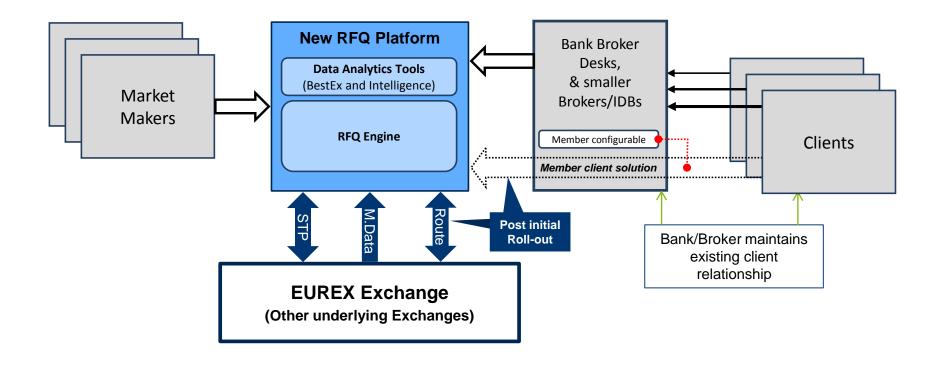
Collection and analysis of price formation to gather important intelligence and effectiveness of counterparties is difficult using existing methodology.

Analysis of available data helps members to make more informed decision around quoting and selection of counterparties

The platform is fully electronic and has a comprehensive audit trail functionality.



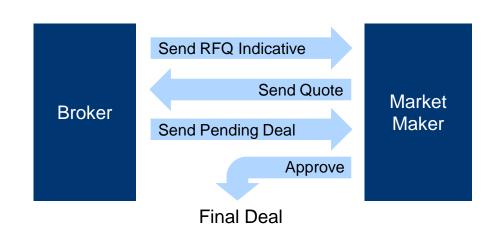
Platform overview and market structural fit



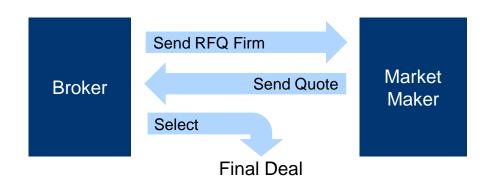


New negotiation workflows: RFQ Firm and RFQ Indicative

RFQ Indicative



RFQ Firm





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



Eurex Exchange Roadmap 2017

Part IV – Update Third Country Firms (TCFs)

September 2017



With MiFID II/ MiFIR application on 3 January 2018, scope of trading activities requiring authorisation will be extended

Authorization requirements Impact on third country firms **Equivalence** regime

Key facts

- MiFID II defines the scope of activities, which require authorization
- Activities requiring authorisation for firms dealing on own account include: membership
 of an exchange, being market makers or applying high frequency trading strategies¹
- There are a few exemptions from the MiFID II requirements e.g. for funds regulated under the AIFM-D or the UCITS regulation²
- Starting from 03 January 2018 third country firms (TCF) will have three options to continue doing business in the European Economic Area (EEA), depending on their business model
 - Use MiFID II / MiFIR equivalence regime (and related transitional periods)
 - Establish a branch in the EEA
 - Establish a legal entity in the EEA
- MiFIR introduces an equivalence regime which allows TCFs to continue doing business in the EEA without the need to establish a branch, depending on their business model
- Between application of MiFID II / MiFIR and equivalence decisions of EU COM, MiFIR introduces transitional periods for TCFs
- Transitional periods allow TCFs to continue business in the EEA until three years after EU COM has made an equivalence determination with regards to a third country
- Details on how to proceed until EU COM decides and of the design as well as potential prerequisites for transitional periods are left to the single member states³



1.Other activities requiring authorization are dealing on own account when executing client orders and having direct electronic access to EU trading venue www.eurexchange.com

2. Exemptions apply to insurance undertakings (Art. 2 (1)(a) MiFID II); collective investment undertakings and pension funds (Art. 2(1)(i) MiFID II); persons involved in commodity derivatives trading satisfying the criteria under Art. 2(1)(j) MiFID II

3.German approach is outlined on following slide; Other EEA countries follow different approaches i.e. UK and Netherlands with "overseas person" exemption

Depending on the business model, MiFID II / MiFIR foresee different options for continuing doing business in the EEA

Minimum requirement to continue business Please note: Transitional period / Set up of EEA branch³ No requirement equivalence This illustration reflects Eurex understanding and **Dealing on own** is no legal account1 guidance! High level business activities **Options to continue** business in EEA **Client business** may heavily depend EU clients² on the concrete business model Market participants should conduct a **Client business** careful strategic **EU retail clients** review of their organisational setup together with the requirements of Client business **Non-EEA clients** their business model

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- Branch or legal entity may need to be set-up in case of negative equivalence determination
- For offering services to eligible counterparties and professional clients within the meaning of Section I of Annex II of MiFID II, may allow operating under transitional periods / equivalence
- Please note that set up of a branch will not allow for passporting; illustration only outlines minimum requirements

German transposition law of MiFID II implements possibilities for exemptions and transitional periods for TCFs

German Exemptions

- § 2(5) German Banking Act (KWG) grants BaFin the authority to exempt TCFs from various provisions of the KWG, including the authorization requirement; Exemptions can only be granted on a case-by-case basis
- Prerequisite is the submission of a complete application for exemption to BaFin; BaFin will assess applications and based on the assessment approve or reject an exemption
- Furthermore, §64v(8) KWG establishes a temporary exemption for TCFs dealing on own account, which become subject to authorization requirements due to the extension of the scope of activities, which require authorization

German Transitional periods for TCFs

- §64v(8) KWG allows BaFin to temporarily exempt particular TCFs, which are dealing on own account in Germany from the MiFID II requirements
- Prerequisite is that TCFs submit a complete application for exemption to BaFin by 02 July 2018; if a complete application was submitted, the exemption in accordance with §2(5) KWG is temporarily granted
- The temporary exemption, which is effectively a transitional period will last from 03 January 2018 until the EU COM has made an equivalence determination regarding the particular jurisdiction of a TCF and ESMA has decided about registering these firms in the register for third country firms
- Completeness of applications will be determined by BaFin;

German Treatment of EEA firms

- EEA firms which intend to be authorized in Germany will be provisionally authorized by BaFin based on German transposition law of MiFID II (2nd FimanoG*)
- Prerequisite is that EEA firms submit a complete application for authorization to BaFin by 02 July 2018
- If a complete application was submitted, EEA firms will be provisionally authorized from 03 January 2018 until BaFin has decided about the authorization; Passporting to other EEA countries will be possible
- After receiving a complete application for authorization; BaFin has up to six months to decide to approve or reject an application for authorization; completeness will be determined by BaFin
- BaFin already accepts applications for authorization; finalization of application will be an interactive process between BaFin and the applicant



Eurex Exchange Roadmap 2017 September 2017

German transitional period for TCFs dealing on own account does not cover high frequency trading requirements¹

German HFT Act criteria

- Dealing on own account
- Latency minimizing infrastructure
 - 10 Gbit/sec in Colocation, P/M account
- No human intervention
- High intraday message rate
 - Daily threshold of 75,000 messages (order entries, quotes, deletions, modifications) per member (to be converted into an annual figure)

MiFID II HFT criteria

- Dealing on own account
- Latency minimizing infrastructure
 - 10 Gbit/sec in Colocation, P/M account in liquid products, having an ExecutionID (= algorithmic)
- No human intervention
- High intraday message rate²
 - Four messages per second for all instruments traded or
 - Two messages per second for a single instrument
- Transitional period in Germany for TCFs dealing on own account does not apply to high frequency trading
- High frequency trading required authorization in Germany, before MiFID II / MiFIR
- MiFID II does not establish a new high frequency trading framework in Germany
- MiFID II only changes a few details of the German high frequency trading provisions



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- MiFID II algorithmic trading requirements apply also to all members and participants of regulated markets and MTFs who are not required to be authorized in accordance with Art. 2(1) (a), (e), (i) and (j) MiFID II
- 2. Messages per second shall be determined
- on the basis of data with regard messages submitted during the preceding 12 months or
- on the period within those 12 months during which the firm was active
- Reports will be provided on a daily basis like today using the new parameters

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