EurexOTC Clear

Member Guide Approved Trade Source:

Bloomberg

February 2016





- Overview
- OTC Client Clearing Workflow
- Supported Functionality/ Flow
- Product Scope
- Trade Flow
- Novation Flow
- Interface for Trade Entry
 - Voice Trading (SWXT)
 - Electronic Trading (BBTI/ALLQ)
- Onboarding
 - Onboarding Steps
 - Used Cases
 - Simulation Guide



Overview - Approved Trade Source (ATS)

Trade Entry to EurexOTC Clear

- All trade entry to EurexOTC Clear has to be done via an ATS
- EurexOTC uses an open API to connect ATS for the clearing of OTC IRS
- Eurex Clearing is agnostic to ATS
- Novation process is identical for all ATS
- Once the trade is submitted for clearing and Eurex Clearing is the CCP, Eurex Clearing is the golden source of the trade; i.e. currently only 'Trade Entry' functionality is supported via Bloomberg. Take-up and Post Cleared Functionality etc. need to be entered through the EurexOTC Clear GUI or the Eurex Clearing FpML Interface. An automated notification to and alignment with Bloomberg does not take place
- Trades from different ATS can be accumulated/ netted

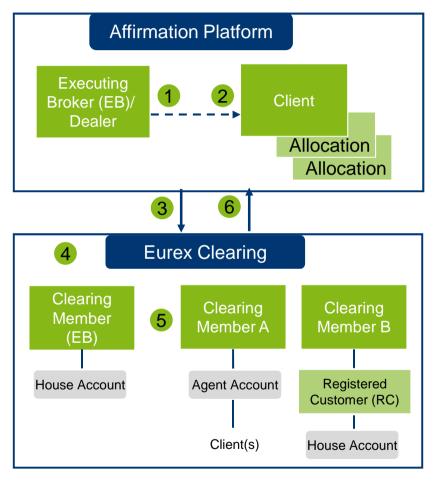


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OTC Client Clearing Workflow



High-level process flow

- Bilateral OTC trade executed
- Client affirms/ allocates & identifies Clearing Member
- Matched trade(s) submitted for clearing
- 4 Eurex Clearing validates trade
- 5 Trade validation and novation
 - Clearing Member(s) take-up
 - Eurex Clearing performs pre-novation incremental risk check
 - Eurex Clearing accepts or rejects trades
 - Trades booked with Eurex Clearing in respective accounts
 - EB-Trade into CM's P-Account
 - Client Trade into CM's A-Account and/ or in an RC-Account
- Trade status sent to affirmation platform. Eurex Clearing
 - · calculates initial and variation margin
 - notifies Clearing Member of trades, positions, margin and collateral requirements
 - maintains trades and respective lifecycle events



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Supported Functionality/ Flow (1/2)

Bloomberg (BGL) ATS

- Bloomberg offers two trade capture methods: Voice Trading (SWXT) and Electronic Trading (BBTI/ALLQ)
- SEF* flow and CFTC reporting for non-U.S. persons is not currently supported
- Currently only 'Trade Entry' is supported. 'Take-up' and Post Cleared Functionality etc. is not available
- Once trade has cleared it is visible on Bloomberg's blotter functionality (BLOT <GO>) as 'Cleared'
- No lifecycle events such as netting/ accumulation etc. will be reflected in Bloomberg
- In order to use Bloomberg for trade entry to EurexOTC Clear, users must be set up as Clearing Member or Registered Customer at Eurex Clearing
- Bloomberg supports interdealer trades (trades between two Clearing Members' proprietary accounts) and client trades (trades between a Registered Customer and a Clearing Member, Clearing Member must be the dealer on Bloomberg)
- The target account must always be specified (for trades between Registered Customer and Clearing Member and for trades between Clearing Member and Clearing Member). This is done either by definition of a default account (BBTI, Dealer account) or selection from a drop down list of available accounts (BBTI, Client account; SWXT, Dealer account and Client account)
- Trades between two Registered Customers are currently not supported



^{*} Swap Execution Facility regulated by the Securities and Exchange Commission and Commodity Futures Trading Commission

Supported Functionality/ Flow (2/2)

Bloomberg ATS

• Supported Eurex role combinations for Bloomberg trades

| | Bloomberg Dealer* | | Bloomberg Client* | |
|---------|-------------------|-----|----------------------|------|
| | Eurex Role | A/C | Eurex Role | A/C |
| CM v CM | СМ | Р | CM | Р |
| CM v RC | СМ | Р | RC | Р |
| | СМ | Р | RC | Α |
| | СМ | Α | RC | Р |
| | СМ | Α | RC | Α |
| | СМ | Р | RC – Fund Manager | Fund |
| | СМ | Α | RC – Fund Manager | Fund |

CM = Clearing Member RC = Registered Customer

P = Principal Account A = Agent Account

^{*} Dealer/Client: Dealer responds to Client's quote requests for electronic trading (BBTI) or enters trades in the role of Execution Dealer with Clients for Voice Trading (SWXT)



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Product Scope (1/2)

Supported Products and Currencies

Voice Trading (SWXT)

- Interest Rate Swaps, Basis Swaps
- · Supported currencies: EUR, GBP, USD, CHF, JPY
- Overnight Index Swaps
 - Supported currencies: EUR, GBP, USD, CHF

Electronic Trading (BBTI/ALLQ)

- Interest Rate Swaps
 - Supported currencies: EUR, GBP, USD, CHF, JPY
- Basis Swaps
 - Supported currency: USD



Product Scope (2/2)

Supported Products and Currencies

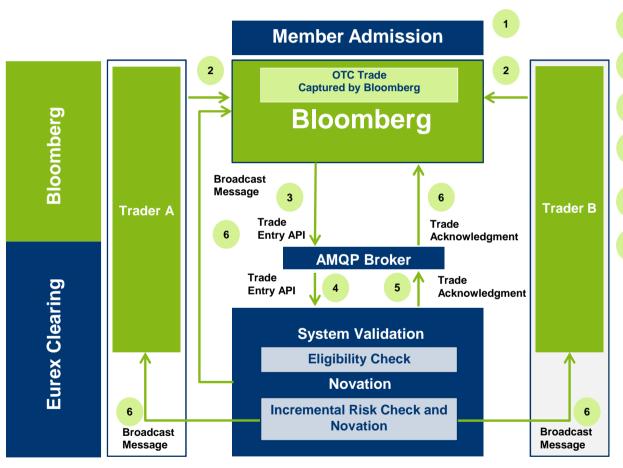
- Supported input parameters for EurexOTC Clear products by Eurex Clearing are provided in the 'EurexOTC
 Clear Product List'. In addition, supported input parameters by Bloomberg* are provided in the specific
 'EurexOTC Clear Bloomberg Product List'
- Both Product Lists are available in the Eurex Clearing Member Section under the following path:
 - Eurex Clearing Member Section --> Technology --> EurexOTC Clear --> Interest Rate Swaps --> choose respective
 Release --> Overview and Functionality
- Eurex Clearing supports clearing of Bloomberg traded OTC IRS Swaps in EUR, CHF, USD, JPY, GBP except:
 - Forward rate agreements
 - Market agreed coupon swaps
- The following limitations on Bloomberg apply:
 - Supported day count conventions: 30/360, 30E/360, ACT/360, ACT/365 and ACT/ACT
 - Interest Rate Swaps and Basis Swaps initial rates (definition of the first floating period) and variable structures (e.g. variable notional, variable swap schedule rates, variable fixed rate or variable index spread) are not supported
 - Electronic Trading (BBTI/ALLQ), only Basis Swaps that are denominated in USD are supported
 - Trades with historical trade date are not supported
 - Inflation Swaps are currently not supported



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Trade Flow



- Select Bloomberg as ATS in Admission Forms
- OTC IRS trade is executed and captured by Bloomberg
- Bloomberg submits trade via Trade Entry
 API

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- Trade is forwarded from AMQP Broker to Eurex Clearing's back-end system Calypso
- Trade Acknowledgment message is sent to Bloomberg by AMQP Broker
 - Successful eligibility- and incremental risk checks: trade is novated, broadcast message is sent to Trader A, Trader B, CM (if Trader not CM) and Bloomberg to confirm the trade (including all trade details, e.g. trade ID, trade status, etc.)

 Bloomberg validity checks not successful: error message is displayed in the Bloomberg GUI, trade is not sent for Clearing.

Eurex Clearing eligibility check not successful: rejection message is sent to Bloomberg with error code, trade flagged in the Bloomberg GUI with Clearing Status Error.

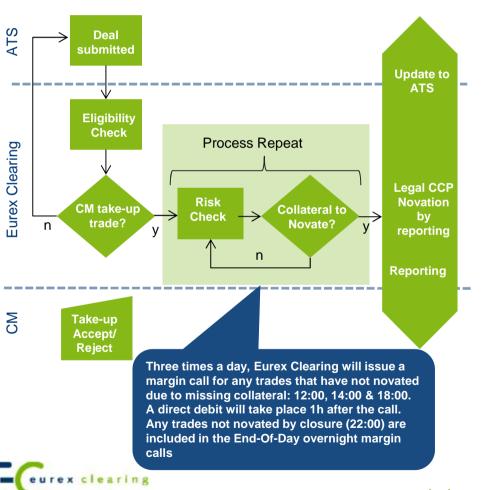
<u>Eurex Clearing incremental risk check not</u> <u>successful:</u> the trade remains in Pending until sufficient collateral is posted

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Novation Flow

Eurex Clearing will continuously novate trades during opening hours: 08:00-22:00 CET.

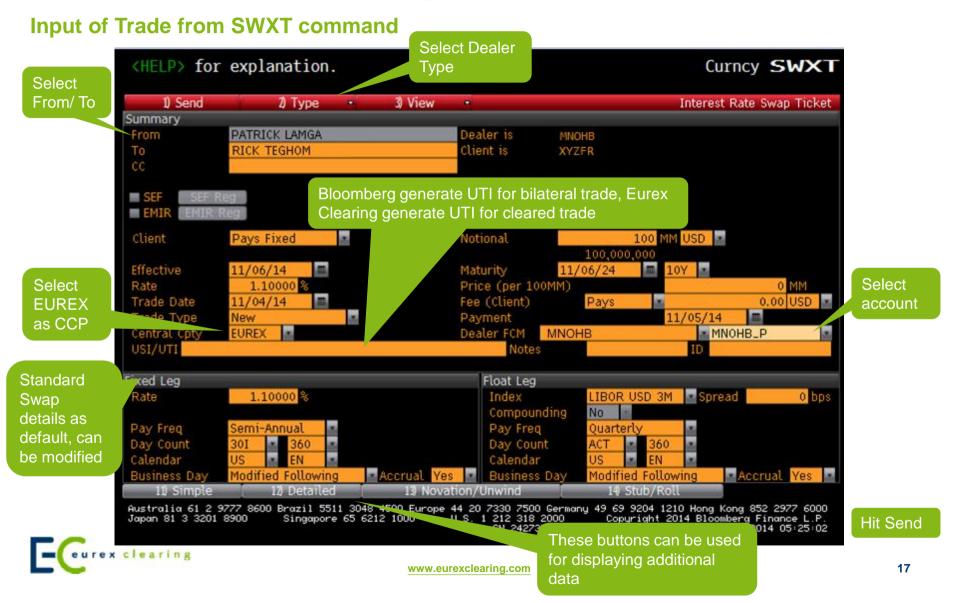


- ATS submits allocated, affirmed and released eligible deals for clearing
- Eurex Clearing checks if the trade is eligible
- Clearing Member takes-up the trade for clearing
- Eurex Clearing performs an incremental risk check i.e. calculates margin requirements and incremental portfolio increase
- Eurex Clearing verifies if pending deals can be covered by available collateral
- If sufficient collateral is available Eurex Clearing will novate the trade:
 - Trade status updated in ATS
 - Trade novated upon 'OTC Trade Novation' report distributed (event driven)
 - If sufficient collateral is not available, the trade returns to incremental 'risk check'
- After the clearing cut-off, remaining pending as well as new deals submitted during closure from ATS are queued for processing next day
- Eurex Clearing issues daily overnight margin call covering the entire portfolio risk, including pending trades

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Trade Entry- Voice Trading (SWXT) (1/6)



Trade Entry- Voice Trading (SWXT) (2/6)

Affirmation pops up for payer XYZFR





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Trade Entry- Voice Trading (SWXT) (3/6)

XYZFR allocates the trades



Trade Entry- Voice Trading (SWXT) (4/6)

Deal is now in status 'Accepted' and sent to Eurex Clearing



Trade Entry- Voice Trading (SWXT) (5/6)

Clearing status is set to 'Pending' in Blotter





Trade Entry- Voice Trading (SWXT) (6/6)

Clearing status is set to 'Pending' in Blotter





Trade Entry- Electronic Trading (BBTI/ALLQ) (1/4)

Obtaining quote (price taker): Market Overview (available through BBTI screen)





Trade Entry- Electronic Trading (BBTI/ALLQ) (2/4)

Dealer responds to quote





Trade Entry- Electronic Trading (BBTI/ALLQ) (3/4)

Trade accepted

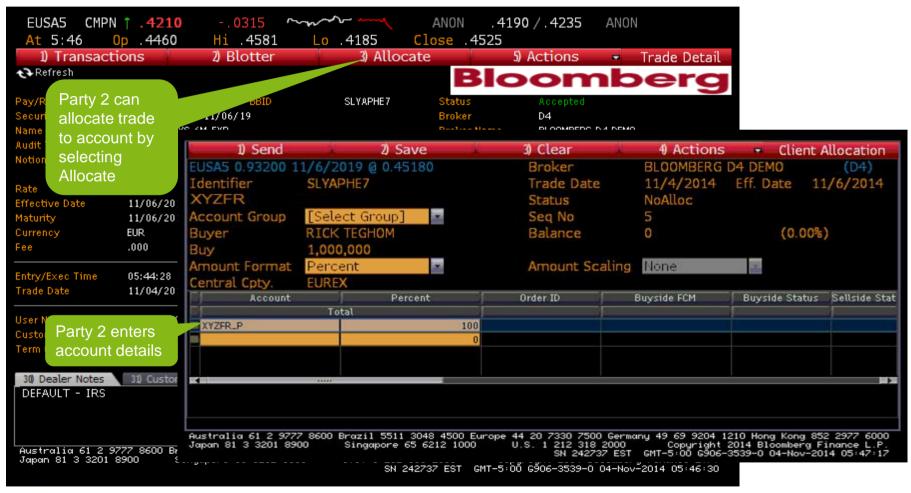


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Trade Entry- Electronic Trading (BBTI/ALLQ) (4/4)

Allocation





Hit Send

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Bloomberg as Approved Trade Source – Onboarding steps

• For the trade execution all counterparties (e.g. in case of an RC the related Clearing Member) need to be setup at the same Approved Trade Source

Registered
Customer /

Clearing Member

Client Setup

- specifies the approved trade source, GlobalLEId of the client/fund, required target accounts (A1, P / position account of the fund), GlobalLEId of the CM via the Static Data form
- sends all forms to the Clearing Member for completion and for signing

Dealer Setup

 specifies their approved trade source, GlobalLEId, preferred source system (if they are using more than one source system) and required target account (A, P) via the Static Data form

Client Setup

· Completes and signs above client forms

Forms

For Eurex Clearing: "EurexOTC Clear Interest Rate Derivative Static Data

... for Registered Customer (Simulation)"1

... for Registered Customer (Production)"1

+ In case of funds, "Upload Sheet Flex Accounts" (xls-sheet)²
For Bloomberg: "BLOOMBERG CLEARING CHANNEL
ONBOARDING FORM" (xls-sheet)

For Eurex Clearing: "EurexOTC Clear Interest Rate Derivative Static Data

... for Clearing Members (Simulation)"1

... for Clearing Members (Production)"1

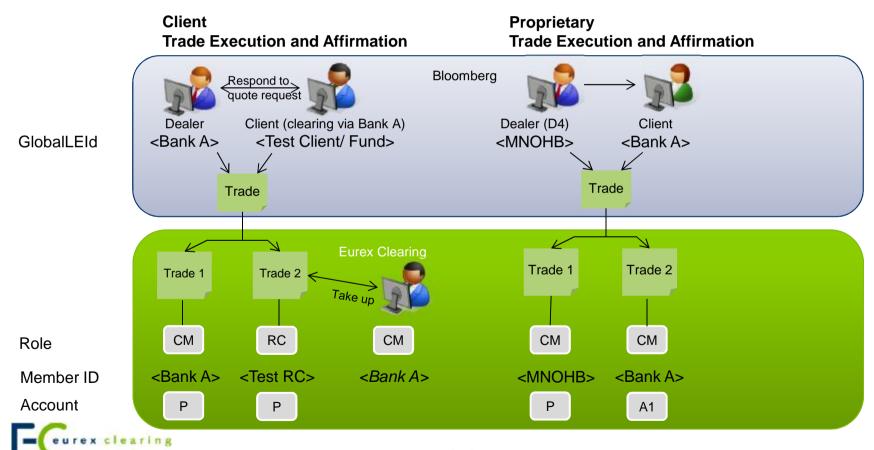
For Bloomberg: complete "BLOOMBERG CLEARING CHANNEL ONBOARDING FORM" (xls-sheet) resp.

- Please send Eurex Clearing forms to your personal Key Account Manager or to <u>otcirs.onboarding@eurexclearing.com</u> (the BGL xls-sheet can also be used to provide details)
- Eurex Clearing will assign RC Member ID where necessary and informs CM and RC
- In case of a dealer setup, dealer needs to contact their FIT Sales Rep or their Integration Rep at Bloomberg and provide Bloomberg the info (so no form is needed)
- In case of a client setup, dealer informs BGL via email to ccponboard@bloomberg.net (incl. the BGL xls-sheet) to update the mapping on Bloomberg clearing database. Please put otcirs.onboaring@eurexclearing.com in cc
- Once the mapping is in place BGL will reply to all confirming the setup



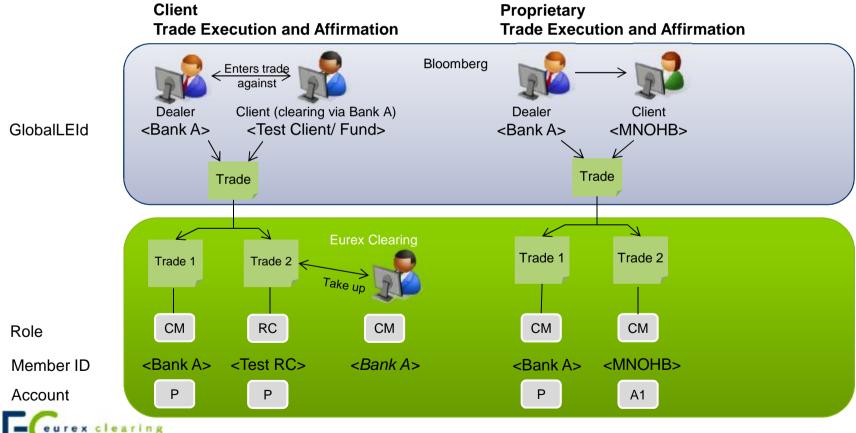
Bloomberg Electronic Trading – Possible Scenarios

- Bank A is set up in the role of dealer on Bloomberg and responding to quote requests of a client; client is setup as RC at Eurex Clearing with Bank A as CM
- MNOHB is setup in the role of dealer on Bloomberg and responding to quote requests of Bank A as client; Bank A is setup as CM at Eurex Clearing



Bloomberg Voice Trading – Possible Scenarios

- Bank A enter trades in the role of execution dealer and trades with clients; Client is setup as RC at Eurex Clearing with Bank A as CM
- Bank A enter trades in the role of execution dealer and trades with MNOHB; MNOHB is setup as CM at Eurex Clearing
- It is also possible to use further test clients with setup as RC at Eurex Clearing with MNOHB as CM



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Bloomberg as Approved Trade Source – Simulation Guide

- Preparatory Tests
 - Check connectivity to Bloomberg and check setup (e.g. mapping of accounts, ability to select Eurex Clearing as Clearing House)
 - Check connectivity to EurexOTC Clear GUI or FpML Interface and Common Report Engine and check setup
 - As "Price maker" ensure that posting market quotes in Bloomberg's Beta environment is possible
 - Ensure that setup in the non-Demo [Beta] mode is done on Bloomberg's side otherwise trade details/messages are not sent to Eurex Clearing
- Test phase 1: Electronic Trading
 - "Member" is set up in the role of dealer on Bloomberg and responding to quote requests of a client; client is setup as RC at Eurex Clearing with the "Member" as CM
 - MNOHB is setup in the role of dealer on Bloomberg and responding to quote requests of the "Members" as client; "Member" is setup as CM at Eurex Clearing
 - Take up client trades
 - Observe trade status in Bloomberg (pending and cleared status)
 - Check that the trades are booked & novated in the expected accounts of the member in the Eurex Clearing System

- Test phase 2: Voice Trading
 - "Member" enter trades in the role of execution dealer and trades with clients; Client is setup as RC at Eurex Clearing with the "Member" as CM
 - "Member" enter trades in the role of execution dealer and trades with MNOHB; MNOHB is setup as CM at Eurex Clearing
 - q It is also possible to use further test clients with setup as RC at Eurex Clearing with MNOHB as CM
 - q Take up client trades
 - Q Observe trade status in Bloomberg (pending and cleared status)
 - Check that the trades are booked & novated in the expected accounts of the member in the Eurex Clearing System
- Test phase 3
 - Repeat test phase 1 and 2 with different roles (use different roles, e.g. trade with one counterparty and clear with another counterparty)



Appendix

Support Hotlines

EurexOTC Clear Contacts

Functional Support

EurexOTC Clear Hotline (Simulation)

Service Times: 10:00- 18:00 CET (Monday - Friday)

Telephone: +49 (69) 21 1 - 1 25 25 Fax: +49 (69) 21 1 - 61 25 25

E-Mail: OTCClear.simulation@eurexclearing.com

EurexOTC Clear Hotline (Production)

Service Times: 08:00-22:00 CET (Monday – Friday)

Telephone: +49 (69) 21 1 – 1 28 28 Fax: +49 (69) 211 – 61 28 28

E-Mail: OTCClear@eurexclearing.com

Technical Support (Production & Simulation)

Customer Technical Support

Service Times: 06:00 - 24:00 CET (Monday - Friday)

Telephone: +49-69-211 10861

E-Mail: cts@deutsche-boerse.com

Bloomberg Contacts

Production Support Desk (functional and technical)

Critical Issues Hotline: +44 20 3525 8550

High-Priority (but not Critical) lssues: fitsupport@bloomberg.net

--alternatively--

Jim Wakeham – Trade Support Manager EMEA (European hours)

Telephone: +44 20 7392 0531

E-Mail: jwakeham@bloomberg.net

Nadeem Khaliq – Technical Support Manager

Telephone: +44 20 7073 3355 E-Mail: nkhaliq@bloomberg.net

Angela Pang / Yasuhirto Nakata (APAC hours)

Telephone: +852 2977 6513

Connectivity Issues

Telephone: +44 20 7073 3330

--alternatively--

Andrew Au-Yong – Manager Telephone: +44 20 7330 7245



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