



T7 Release 10.1

Final Release Notes Eurex

Version 1.3

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1. Overview T7 Release 10.1

Deutsche Börse AG is planning to launch T7 Release 10.1 on 27 June 2022.

The following diagram gives an overview of the introduction schedule:



Deutsche Börse AG provides a dedicated release simulation environment 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 10.1 is planned to start on 02 May 2022.

In addition to the T7 release simulation, Deutsche Börse AG offers a T7 Release 10.1 Cloud Simulation to allow trading participants and Independent Software Vendors (ISVs) to test the T7 Release 10.1 ETI, FIX LF interface, as well as RDI, MDI, EMDI and EOBI interface changes. In the Cloud Simulation, participants can initiate predefined market scenarios and test specific strategies more easily than in a shared environment. Cloud Simulation is available around the clock for a fixed price per hour and started on 01 April 2022.

For more information on the T7 Cloud Simulation, please refer to <https://www.eurex.com/ex-en/support/technology/t7-cloud-simulation>.

1.1 New Features and Enhancements Overview

The following new features and enhancements will be introduced with or after T7 Release 10.1:

- Next Generation Exchange-Traded Derivatives (ETD) contracts:
 - Sub-monthly expiring contracts
 - New Instrument Subtype for Futures Calendar Spreads
- Transaction Size Limits Enhancements including the introduction of Clearer TSLs
- Simplified Variance Futures
- Payload Encryption for FIX LF Interface
- Further Changes and Enhancements

1.2 Notes on Interfaces

T7 Release 10.1 will provide backwards compatibility for the T7 ETI/FIX LF interface version 10.0, i.e. participants who do not want to use the new functionality will still be able to connect to T7 with the interface layout version 10.0 even after the production launch of T7 Release 10.1.

Public market and reference data interfaces, including EOBI, EMDI, MDI, RDI/RDF, as well as reports and data files, will not provide backwards compatibility.

1.3 Further Reading

The existing documents have been or will be revised for T7 Release 10.1. The following table provides an overview of the schedule for the publication.

T7 Release 10.1	Derivatives Markets	Cash Markets	Combined	Q1 / 2022			Q2 / 2022		
				Jan	Feb	Mar	Apr	May	Jun
T7 Release 10.1 - Release Notes	X	X		◆			●		
T7 Functional Reference			X				●		
T7 Functional and Interface Overview			X				●		
T7 Participant Simulation Guide			X				●		
T7 Cross System Traceability			X				●		
T7 Incident Handling Guide			X				●		
T7 Participant and User Maintenance Manual	X	X					●		
Contract Notes Description		X							●
T7 Known Limitations			X				■		●
T7 Trader, Admin and Clearer GUI – User Manual	X	X					■		●
T7 Trader, Admin and Clearer GUI – Installation Manual			X				●		
T7 Enhanced Trading Interface – Manual incl. XSD, XML Representation and Layouts			X			◆	■		●
T7 FIX LF – Manual incl. XML Representation and FIX Repository			X			◆	■		●
T7 Market, - Enhanced Order Book- and Reference Data Interfaces Manual incl. Fast Message Template, Repository & FIXML Schema Files			X			◆	■		●
T7 Extended Market Data Services – Manual incl. Fast Message Template and Underlying Ticker Data			X				■		●
Cash Market Instrument Reference Data Guide		X					●		●
T7 XML Report Reference Manual			X				■		●
Common Report Engine User Guide			X				●		
Common Upload Engine User Guide			X				●		
Exchange Rules & Regulations		X							●
Market Models		X							●

◆ Cloud Simulation/Prelim. Version ■ Simulation Version ● Production/Final Version

Please note that the outlined schedule is subject to change.

The documents will be available on the Eurex Web site www.eurex.com under the menu path:

> Support > Technology > T7 System > T7 Release 10.1

1.4 Contacts

If you have any questions or require further information, please contact your Global Key Account Manager Trading. Alternatively, please contact your Technical Key Account Manager using your VIP number or via e-mail to cts@deutsche-boerse.com.

1.5 Definitions and Abbreviations

Term / Abbreviation	Description
DBAG	Deutsche Börse AG
CRE	Common Report Engine
EMDI	T7 Enhanced price level aggregated Market Data Interface
EOBI	T7 Enhanced Order Book Market Data Interface
ETD	Exchange-traded derivatives
ETI	T7 Enhanced Trading Interface
ETF	Exchange-Traded Funds
ETSL	Exception Transaction Size Limits
Eurex EnLight	Eurex EnLight is a price discovery service offered by Eurex on the T7 platform to negotiate TES transactions electronically
FIX LF	FIX LF interface
GUI	Graphical User Interface
MDI	T7 netted price level aggregated Market Data Interface
RDF	T7 Reference Data File
RDI	T7 Reference Data Interface
RfQ	Request for Quote
STSL	Standard Transaction Size Limits
T7	T7 is the trading architecture developed by Deutsche Börse Group
TES	T7 Entry Service
TSL	Transaction Size Limits

2. Next Generation Exchange-Traded Derivatives (ETD) Contracts

Currently, the product scope of Eurex supports at most one expiration per month and per product. In case of more than one expiration per month, additional products need to be set up. As an example, index options contracts expiring on the 3rd Friday of a month, quarter or year are summarized by one product ("main options product", e.g. OESX) and index options contracts referring to the same underlying and expiring on the 1st, 2nd or 4th Friday of a month are summarized by weekly options products (e.g. OES1, OES2 or OES4, respectively).

2.1 General Information

2.1.1 Business Initiatives

In the future, the product variety of Eurex will be enhanced to support more than one expiration per month, which will apply across the trading, clearing and risk management area. The Eurex Next Generation ETD Contracts initiative will summarize all required cross-system changes in the trading, clearing and risk management area and will provide – as a first step – the following new trading opportunities:

- **Integration of weekly expiring options contracts:**
Monthly expiring contracts belonging to weekly options products will be integrated into the corresponding main options product as integrated weekly expiring contracts. This will affect all weekly options products in the fixed income, equity and equity index area including the options on the underlying EURO STOXX index (OESX) but excluding the KRX weekly options products OKW1, OKW3, OKW4, and OKW5. After the integration is completed, the weekly options products will become obsolete.
Weekly expiring options contracts can also be used as leg instruments in any standard options strategy, non-standard options strategy and options volatility strategy. As an example, call or put time spreads as standard options strategy can be used to roll positions between weekly expirations or from weekly to monthly expirations by one transaction.
- **Daily expiring futures contracts in physically settled single stock futures:**
Physically settled single stock futures will be equipped with daily expiring futures contracts having a lifetime of one business day. Consequently, on each business day, a new single stock futures contract will be created with individual T7 instrument ID and ISIN and will be expiring on the same business day.
Daily expiring single stock futures contracts are used as leg instrument of an options volatility strategy of the corresponding options product allowing delta-neutral hedging in the stock options area with physical stocks.
- **Daily expiring MSCI futures contracts:**
MSCI index futures will be equipped with daily expiring futures contracts having a lifetime of three business days. Consequently, on each business day, each MSCI futures product will have three daily expiring futures contracts available for trading, one contract with last trading day of today (T+0), a second contract with last trading day on the next business day (T+1) and a third contract with last trading day on the next after the next business day (T+2).
Daily expiring MSCI futures contracts can be used as a first leg in calendar spreads together with a quarterly expiring futures contract as second leg. Such a calendar spread is representing the basis instrument of the quarterly expiring futures contract and, consequently, will be denoted as "basis spreads".

For more details about the business opportunities and the Next Generation ETD Contracts project, please refer to Eurex Circular 057/2021, 036/2022, to the Final Release Notes T7 10.0 (§ 2) and to the following link of the Eurex Next Generation ETD Contracts initiative:

<https://www.eurex.com/ex-en/support/initiatives/project-readiness>

2.1.2 Impact on Options Products

After the integration of weekly expiring contracts has been concluded and the daily expiring contracts of physically settled single stock futures products are activated, the impact of the Next Generation ETD Contracts project is illustrated by the following example in the equity derivatives area using equity derivatives products based on the underlying BASF.

- The main option product (here: BAS) will contain integrated weekly expiring contracts.
- The weekly option products (here: BAS1, BAS2, BAS4 and BAS5) will become obsolete and will be removed.
- The physically settled single stock futures (here: BASP) will contain daily expiring contracts with a lifetime of one business day supporting options volatility strategies (here: in BAS).

Prod Flag	Product	Product (Long Description)	Product Group	Product ISIN	Underlying ISIN	Settlement Type	Exercise Style
F	1BAS	BASF	STOCK TRACKING FUTURES	DE000A210LG3	DE000BASF111	Cash	
F	B2AS	BASF Dividend Futures	SINGLE STOCK DIVIDEND FUTURES	DE000A1EZHH5	XC000A1CRLA5	Cash	
O	BAS	BASF	SINGLE STOCK OPTIONS	DE000BASF111	DE000BASF111	Share	American
O	BAS1	BASF 1st Friday Weekly Options	SINGLE STOCK OPTIONS	DE000A163YW0	DE000BASF111	Share	American
O	BAS2	BASF 2nd Friday Weekly Options	SINGLE STOCK OPTIONS	DE000A163YX8	DE000BASF111	Share	American
O	BAS4	BASF 4th Friday Weekly Options	SINGLE STOCK OPTIONS	DE000A163YY6	DE000BASF111	Share	American
O	BAS5	BASF 5th Friday Weekly Options	SINGLE STOCK OPTIONS	DE000A163YZ3	DE000BASF111	Share	American
O	BASE	BASF [european]	SINGLE STOCK OPTIONS	DE000A1HUFJ9	DE000BASF111	Share	European
F	BASG	BASF	SINGLE STOCK FUTURES	DE000A0V8NN8	DE000BASF111	Cash	
F	BASP	BASF [physical]	SINGLE STOCK FUTURES	DE000A2RPNN2	DE000BASF111	Share	
F	TBAS	BASF	EQUITY TOTAL RETURN FUTURES	DE000A2X1ZD4	DE000BASF111	Cash	

 = will disappear = integration of dailies or weeklies

Table: Example based on products with the underlying BASF

For options on the EURO STOXX index SX5E, the end-of-month options contracts currently provided via the product OMXS will also be integrated together with the weekly contracts of OES1, OES2 and OES4 into the corresponding main option product OESX.

As general rule, all parameters specified for a main product will also apply for the corresponding integrated weekly expiring options contracts. Since, for example, the transaction size limits (TSLs) are defined on the product level, this can impact user specific TSL settings in case the user TSL settings are chosen by the participant's administrator to be different in weekly (here: BAS1/2/4/5) versus main (here: BAS) options products. Please also note chapter 3: *Transaction Size Limits Enhancements including the introduction of Clearer TSLs*.

The integration of weekly expiring options contracts will also impact quoting activities on the T7 trading platform. Since quoting activities are based on mass quote requests applied in a product context, quotes referring to weekly expiring contracts will need to be considered in the main option product after their integration. The same argument also applies to quote activation and de-activation requests. The ESU limits of main options products will be verified and – if deemed necessary – adjusted accordingly.

2.1.3 Contract Identification Eligibility

To ensure the consistency of trading, clearing and risk management activities throughout the entire value chain, a contract identification eligibility concept will be applied for contracts and participants. This concept is based on allowed combinations of contract levels and participant levels as defined by the exchange. Combinations which are not allowed will be rejected.

The following level concept is applied for contracts:

Contract Validation	Valid Values of Contract Identification Eligibility*	Format
Contract Level 1	Contract Month/Year	YYYY MM
Contract Level 2	Expiration Date or Contract Date	YYYY MM DD
Contract Level 3**	Contract Date	YYYY MM DD

(*) New contract attribute in T7 RDI / RDF: Contract Identification Eligibility – tag 25215 (instrument snapshot message)

(**) Not relevant for Eurex members at this point in time

The following level concept is applied for participants:

Participant Validation	Valid Values	Format
Participant Level 1	Participant is using a functional key for contract identification based on maturity month and year	YYYY MM
Participant Level 2	Participant is using a functional key for contract identification based on expiration date or contract date	YYYY MM DD
Participant Level 3**	Participant is using a functional key for contract identification exclusively based on contract date	YYYY MM DD

The contract and participant levels will be completely maintained by Eurex in such a way that the contract and participant levels are consistent to each other across the trading and clearing layer. For more information about the handling of contract and participant levels, see § 2.2.2 – “Production Rollout Approach”.

2.2 Next Gen Project Migration Approach

2.2.1 Set-up Activities already performed in Simulation Environment

Technical changes required for the handling of sub-monthly expiring contracts were already introduced by T7 Release 10.0. These changes comprised additional contract reference data attributes via the Eurex Reference Data Interface / Reference Data File (RDI/RDF) and GUI adaptations for displaying sub-monthly expiring contracts. In addition, the contract date was introduced for flexible instruments. The existing concept of the numerical T7 instrument identification is retained and applies to sub-monthly expiring contracts. For further information, please refer to the T7 Release Notes 10.0 and to the above mentioned link of the Eurex Web page.

Since February 2022, sub-monthly expiring contracts were made available in the T7 Release 10.0 Simulation environment for selected options and futures products covering all three business initiatives mentioned above.

Sub-monthly expiring contracts are activated in the following products.

- Integrated weekly options contracts in
 - single stock options AXA, BAY, and NOA3
 - equity index options ODAX (including end-of-month expiring contracts) and OSMI
 - Bund options product OGBL
- Daily expiring contracts in single stock futures AXAP, BAYP and NO3P
- Daily expiring contracts in MSCI futures FMEA and FMWN

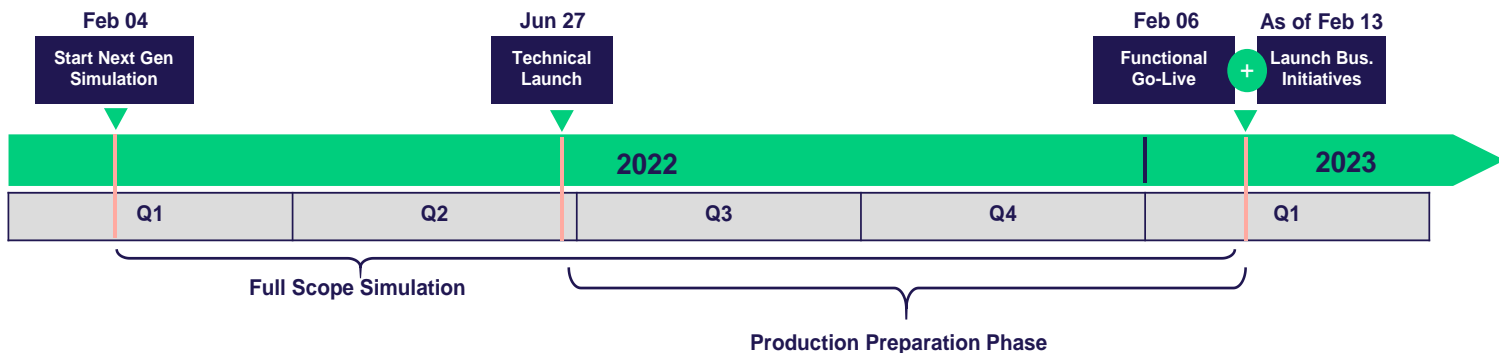
The full scope simulation phase will last until the launch of the business initiatives in the production environment.

More details about the scope of sub-monthly expiring contracts in the Simulation environment can be found in the *Participant Simulation Guide* provided on the Eurex Web page.

2.2.2 Production Rollout Approach

To introduce the technical changes required to handle sub-monthly expiring contracts, the technical release dates for T7 Release 10.1, C7 Release 8.1 and Prisma Release 11.1 on June 27, 2022, will stay unchanged as already communicated in previous circulars.

Independent of the technical changes introduced with the releases on June 27, primarily in the clearing and risk management layer, the usage of the YYYYMM logic can be continued by all market participants after June 27, 2022, and until the functional go-live on February 06, 2023, will take place. During this production preparation phase, no sub-monthly expiring contracts will be activated.



To facilitate overall industry readiness, Eurex will perform a functional go-live approach that includes the following steps:

- As of February 06, 2023, all market participants are required to be able to handle sub-monthly expiring contracts. The usage of the YYYYMMDD logic becomes mandatory for all Exchange Traded Derivatives (ETD) contracts available for trading at Eurex Deutschland (Eurex ETD Contracts). Consequently, the contract eligibility flag will be switched by Eurex for all ETD contracts available at that point in time to the YYYYMMDD logic (i.e. to Level 2).

Please note that all Eurex ETD Contracts that are created after 06 February 2023 will also be set up as contracts requiring the YYYYMMDD logic, i.e. are created as Level 2 contracts.

As Eurex expects trading and clearing participants to be able to support the YYYYMMDD logic as of 06 February 2023, Eurex will automatically flag all participants as of the functional go-live date as compliant with the new identification logic based on YYYYMMDD (i.e. compliant with Participant Level 2).

- Launch of Business Initiatives
 - Integration of weekly expiring contracts starting as of 13 February 2023 (sequential listing approach)
 - Basis trading for MSCI Futures (Market-on-close) with daily expiring contracts in MSCI Futures on 20 February 2023
 - Volatility strategies for Single Equity Options with daily expiring contracts in physically settled Single Stock Futures on 27 February 2023

For more details about the production roll-out approach and the launch of the business initiatives, please refer to Eurex Circular 036/2022.

Please note that all consistency checks regarding the contract identification eligibility between participants and contracts described in the preliminary release notes are automatically satisfied by this Production Rollout Approach.

During the production preparation phase, trading participants can switch to the new contract logic based on YYYYMMDD to handle monthly expiring contracts. However, it is required that all trading and clearing participant must switch to the new YYYYMMDD logic latest by February 06, 2023, to handle monthly and sub-monthly expiring contracts.

Additionally, a grace period as described in the preliminary release notes is not supported anymore.

2.3 New Instrument Subtypes for Futures Calendar Spreads

With T7 Release 10.1, Futures Calendar Spreads will be equipped with a new instrument subtype to differentiate between *basis spreads* and *calendar spreads* in a conceptually similar way to how this is already done in the options area. As an example, please compare this to the instrument type Standard Option Strategy and associated instrument subtypes like bull strategy (BUL), bear strategy (BER), straddle (STD) etc.

Two new instrument subtypes will be introduced:

- BSPD (Basis Spread)
- SPD (Futures Calendar Spread) – the default subtype.

The instrument sub-types will be assigned to any Futures Calendar Spread instruments by the exchange and it will not be possible for participants to modify the assignment.

The subtype of Futures Spreads will not be filled by the user in any request, but the subtype will be filled in messages from T7 to the user.

The subtype of Futures Calendar Spread instruments will be available via the electronic interfaces (ETI, FIX LF, RDI), the GUI, and the XML reports in the same way as for other complex instrument types such as Standard Option Strategies (see field SecuritySubtype, tag 762, in the RDI / RDF manual). The new value values are also provided by the C7 Clearing Platform in the corresponding C7 Trade Notification messages.

The new calendar spread instrument subtype will also be used to introduce a fee differentiation for leg trades in basis spreads. This concept is equivalent to the fee differentiation already applied to leg trades resulting from packs and bundles in short term interest rate (STIR) futures.

2.4 Impacts on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the interface manuals and to the *Online Help* in the GUIs.

2.4.1 ETI

The new subtype for Futures Spreads will be represented in the existing tag 762 *SecuritySubType* and it will become available for Futures spreads in all affected messages from T7.

The subtype will not be required in any request for Futures Spread instruments, such as the *Create Strategy* request, but it will be contained in the corresponding messages from T7, such as the *Create Strategy Response* message, the *Trade Notification* message, or the *TES Broadcast* message.

2.4.2 FIX LF

The instrument subtype will become available for Futures Spreads instruments in all affected messages.

2.4.3 Public Reference Data

The instrument subtype will be available for Futures Spreads instruments in all affected messages, e.g. in the *Instrument Snapshot* message.

2.4.4 T7 Trader GUI

Futures Spread orders will be entered with a subtype, either SPD or BSPD.

If the GUI detects a wrong subtype or if the GUI detects that the instrument already exists, the Futures Spread will not be entered immediately but the user will receive a warning.

The name representation of Futures Spreads instruments in the various views will contain the correct instrument sub-type SPD or BSPD, e.g. "FESX BSPD Today+1 Mar22".

2.4.5 XML Reports

The instrument subtype will be displayed also for Futures Spreads instruments wherever the field *instrumentSubtype* is on display, e.g. in

- TA113 Complex and Flexible Instrument Definition
- TE600 Eurex EnLight Maintenance
- TE610 Eurex EnLight Best Execution Summary

The field *instrumentSubtype* will be introduced in the following report:

- TE810 T7 Daily Trade Confirmation

3. Transaction Size Limits Enhancements including the Introduction of Clearer TSLs

With T7 Release 10.1, Eurex will significantly alter the Transaction Size Limits (TSL) functionality.

- Firstly, the maintenance of TSLs will be updated
- Secondly, Clearing Members will be given the ability to define TSLs for their clearing clients (T7 Trading Participants)

Therefore, in future, three types of stakeholders will be able to configure TSLs:

- Trading Participants covering their own trading activity via T7 Admin GUI
- Clearing Members covering the trading activity of their clearing clients via T7 Clearer GUI
- Eurex covering all trading activity

Please note that there will be a migration period (after the production launch of T7 Release 10.1), during which time participants will be able to setup new TSL configurations while the existing TSL regime will remain in place and will be fully functional.

Please find extensive documentation on the subject on the Eurex website eurex.com:

> Support > Initiatives & Releases > Project Readiness > Transaction Size Limits (TSL) Enhancements

3.1 Functional Description

Eurex will introduce two new classes of TSLs called

- Standard Transaction Size Limit (STSL)
- Exception Transaction Size Limit (ETSL)

3.1.1 Terminology and short Description

3.1.1.1 TSL Product Groups

TSL Product Groups are a new concept with T7 Release 10.1. Eurex will create the TSL Product Groups and will group all products into these groups. Every product will only belong to one single TSL Product Group. It will not be possible that a product belongs to no TSL Product Group or to more than one TSL Product Group. Some TSL Product Groups may contain only a single product while other may contain multiple Products. These TSL Product Groups will then be used by all Trading Participants, Clearing Members and by Eurex while defining the STSLs.

The following table outlines the currently planned TSL Product Groups. TSL Product Groups are based on existing Legal Product Groups but are further subdivided where necessary.

Existing Legal Product Groups	TSL Product Groups
BOND INDEX FUTURES	Use already existing Legal Product Group
COMMODITY INDEX FUTURES	Use already existing Legal Product Group
COMMODITY INDEX OPTIONS	Use already existing Legal Product Group
CURRENCY FUTURES	Use already existing Legal Product Group
CURRENCY OPTIONS	Use already existing Legal Product Group
DAILY USDKRW CURRENCY FUTURES	Use already existing Legal Product Group

Existing Legal Product Groups	TSL Product Groups
EQUITY TOTAL RETURN FUTURES	Further sub-divided by Underlying Country, e.g., Equity Total Return Futures - Germany
EXTF-FUTURES	Use already existing Legal Product Group
EXTF-OPTIONS	Use already existing Legal Product Group
FIXED INCOME FUTURES	Further sub-divided by tenor, e.g., Fixed Income Futures - Tenor L
FUTURE ON XETRA-GOLD	Use already existing Legal Product Group
FUTURES ON EXCHANGE-TRADED COMMODITIES SECURITIES	Use already existing Legal Product Group
INDEX DIVIDEND FUTURES	Use already existing Legal Product Group
INDEX DIVIDEND OPTIONS	Use already existing Legal Product Group
INDEX FUTURES	Further sub-divided by Liquidity Class and Notional Contract Value, e.g., Index Futures - Liquidity Class 1 - High Notional Contract Value
INDEX OPTIONS	Further sub-divided by Liquidity Class, e.g., Index Options - Liquidity Class 1
INTEREST RATE SWAPS FUTURES	Use already existing Legal Product Group
KOSPI-FUTURES	Use already existing Legal Product Group
KOSPI-OPTIONS	Use already existing Legal Product Group
MOC FUTURES	Use already existing Legal Product Group
MONEY MARKET FUTURES	Use already existing Legal Product Group
OPTION ON XETRA-GOLD	Use already existing Legal Product Group
OPTIONS ON EXCHANGE-TRADED COMMODITIES SECURITIES	Use already existing Legal Product Group
OPTIONS ON FIXED INCOME FUTURES	Further sub-divided by underlying tenor, e.g., Options on Fixed Income Futures - Tenor L
OPTIONS ON MONEY MARKET FUTURES	Use already existing Legal Product Group
SINGLE STOCK DIVIDEND FUTURES	Further sub-divided by Underlying Country, e.g., Single Stock Dividend Futures – Germany
SINGLE STOCK FUTURES	Further sub-divided by Underlying Country, e.g., Single Stock Futures – Germany
SINGLE STOCK OPTIONS	Further sub-divided by Underlying Country, e.g., Single Stock Options – Germany

Existing Legal Product Groups	TSL Product Groups
STOCK TRACKING FUTURES	Further sub-divided by Underlying Country, e.g., Stock Tracking Futures – Germany
TOTAL RETURN FUTURES	Use already existing Legal Product Group
VARIANCE FUTURES	Use already existing Legal Product Group
VOLATILITY INDEX FUTURES	Use already existing Legal Product Group
VOLATILITY INDEX OPTIONS	Use already existing Legal Product Group

3.1.1.2 TSL User Groups

TSL User Groups are also a new concept with T7 Release 10.1. TSL User Groups are not related to the already existing Trader Groups or Risk Groups for users. Trading Participants will be able to create these TSL User Groups and group all their users into them. A user may belong to no or to only one TSL User Group. If a Trading Participant user belongs to a TSL User Group, both STSL and ETSL can be defined while the exchange and Clearing Members can define only STSL without a TSL User Group. If a Trading Participant user does not belong to a TSL User Group, only ETSL can be defined. A Trading Participant will be able to create up to 5 different TSL User Groups. TSL User Groups will be specific to each Trading Participant and they will neither be visible to Clearing Members nor to other Trading Participants.

3.1.1.3 TSL Type

TSLs will be configured for three different TSL types, namely on-book, TES, and Calendar Spreads. The TSLs types already exist today and will remain unchanged in the new TSL regime.

3.1.1.4 Standard Transaction Size Limits (STSL)

STSLs will cover the vast majority of the TSL configuration per TSL Type, defining TSLs for a group of products (TSL Product Groups) and/or groups of users (TSL User Groups).

3.1.1.5 Exception Transaction Size Limits (ETSLs)

ETSLs will allow Trading Participants to define TSLs per user, product and TSL type, up to an exchange-defined maximum number of exceptions to cater for individual needs. The calculation of the maximum number of exceptions is outlined below.

An ETSL can be higher or lower than the respective STSL of a given Trading Participant. However, even if an ETSL set by a Trading Participant is higher than any corresponding STSL value set by the exchange, by the Clearing Member, or by the Trading Participant, the calculated *effective* TSL will not exceed the STSLs defined by the exchange or by the Clearing Member.

3.1.2 Basic concept

The following table outlines the TSL configuration possibilities per stakeholder:

Stakeholder	TSL Class	Granularity
Eurex	STSL	Per TSL Product Group and TSL Type
Clearing Member	STSL	Per TSL Product Group, Clearing Client, and TSL Type

Stakeholder	TSL Class	Granularity
Trading Participant	STSL	Per TSL Product Group, TSL User Group, and TSL Type
Trading Participant	ETSL	Per Product, User, and TSL Type

All above mentioned stakeholders will be able to define STSLs per TSL Product Group and TSL Type. Eurex will determine the limits for the whole market, the Clearing Members for their clearing clients and the Trading Participants for their TSL User Groups. New Trading Participants will start with no STSLs or ETSLs. In addition, only Trading Participants will be able to define ETSLs per User and Product and TSL Type. ETSL are defined on a more granular level compared to STSL to enable fine tuning, if necessary.

Clearing Members will be able to define STSL for their clearing clients even when the C7 capacity assignment is not enabled. Therefore, STSLs can be defined upfront and will become active once a C7 capacity assignment is performed.

Please note: STSL maintenance for the Clearing Members will be done through the T7 Clearer GUI. There is no access possibility to STSL from the C7 GUI.

It will be possible to define a value for a TSL definition that is equal to or larger than zero (=0). If zero is chosen, no trading will be possible. If the TSL value is not set for a TSL definition, then no restrictions will apply.

Important: This is a change in behavior compared to the existing functionality. Zero will disable trading as before but having set no entry will act as a “wildcard”. If the limit is set to blank (no entry), this limit will not be considered, contrary to the current behavior, where this means that no trading is possible. This means, if a Trading Participant chooses not to populate any TSLs, then its orders, quotes, and TES trades are only validated against the TSLs of the other stakeholders, meaning Clearing Member and Eurex. The same logic applies if a Clearing Member chooses not to populate its TSLs. Eurex has set its own TSLs for all TSL Product Groups, ensuring that all orders, quotes, and TES trades are validated against at least one limit.

Trading Entitlements for Product Assignment Groups are not impacted by the changes of TSLs. The entitlement for Trading Participants will be adjusted so that a user with the “Service Administrator” role can define the TSL. For Clearing Members, a new role “CM Service Administrator” is created enabling the TSL maintenance. All users of a Clearing Member currently using the “Service Administrator” role will automatically be assigned with this new role (and the existing role will be de-assigned). There is no need for adjustment of entitlement for Trading Participants or Clearing Members.

The definition of TSLs will be done via the T7 Admin and T7 Clearer GUIs, either manually or via the import/export functionality. Eurex will publish the TSL Product Groups via the Reference Data Interface (RDI) and via RDF on its Common Report Engine (CRE). New XML reports will be introduced, and existing XML reports will be adjusted, to reflect the new TSL regime.

3.2 Effective TSL Calculation

The effective TSLs will be calculated per product, user, and TSL Type and will aggregate all the different TSL configurations to a single limit that T7 uses for the validation. In general, the effective TSLs will be taken from the lowest value across all stakeholders (with the exception that an ETSL can overwrite an STSL given to the user by the user’s Trading Participant).

An ETSL can be defined higher than the corresponding STSLs. Also, a Clearing Member's STSL can be defined higher than the exchange-defined value. Vice versa, Eurex can bring down the limit below the values as defined by Clearing Member or Trading Participant. But the calculation of the *effective* TSL will follow the rules of hierarchy.

For examples outlining the effective TSL calculation in various constellations please see the first table in subchapter 3.6 below.

When a Clearing Member performs a capacity de-assignment for a product in C7, all effective TSLs for the clearing client for the affected product(s) will be zero. Please note that the TSL definitions will not be adjusted (after a capacity assignment from C7 they will be used again in the calculation of effective TSLs).

3.3 Maximum Number of ETSLs

The number of ETSLs per Trading Participant will be limited. The maximum number of ETSLs per Trading Participants will be calculated as:

$$N = U * E$$

where:

- N is the maximum number of ETSLs per Trading participant. A single ETSL is defined as the unique combination of User, Product, TSL Type, and Quantity. For example, if a Trading Participant sets ETSLs for User TP1US1 and Product AAAA for (1) on-book, (2) TES and (3) Spread, then this counts as three ETSLs.
- U is the number of users enabled for trading per Trading Participant. A user is considered to be enabled for trading if it either has no negative on-book trading entitlement (i.e., entitled for on-book trading) or has no negative TES trading entitlement (i.e., entitled for TES trading).
- E is the ETSL Multiplier defined by Eurex. The parameter is set to 100.

The Trading Participant may allocate those ETSLs at their own discretion. For example, a Trading Participant with two users enabled for trading may assign up to 200 ETSLs to a single user, while the other user has none.

Reducing the number of users enabled for trading will immediately lower the maximum number of ETSLs for a given Trading Participant. In a scenario where the Trading Participant will have more ETSLs defined than permitted by the current number of users enabled for trading, the Trading Participant will be prevented from updating existing ETSLs or creating new ETSLs. The Trading Participant will be expected to delete enough ETSLs before being able to maintain ETSLs again. If a Trading Participant deletes a user, all ETSLs related to this particular user will be deleted automatically.

3.4 Maintenance of TSL Product Groups

Going forward Eurex will maintain the TSL Product Groups for all products. New products will be assigned to a TSL Product Group when they are launched. Additionally, Eurex will regularly (approximately every six months) review the composition of TSL Product Groups.

Assigning a different TSL Product Group to an existing product may have an impact on the effective TSLs (see the examples in chapter 3.6 below). Hence, changes to existing TSL Product Groups will be announced in advance to give Trading Participants and Clearing Members the opportunity to adjust their configurations accordingly.

3.5 Migration Process

3.5.1 Production

With the launch of the T7 Release 10.1 in Production, a migration phase will start. During the migration phase, the existing T7 Release 10.0 TSL functionality will remain operational, while stakeholders will be able to configure the new TSL regime via the T7 Admin GUI respectively the T7 Clearer GUI. Stakeholders will be able to upload the new limits, but they will not yet have an operational impact.

At the end of the migration phase the new TSL configuration will be operationally enabled, while the current TSL configurations will be operationally disabled. The last day of the migration phase will be Friday 22 July 2022. The new TSL configuration will be operationally enabled Monday 25 July 2022.

At the beginning of the migration phase, the TSL Product Groups will be available in T7 and will be accessible via the Reference Data Interface (RDI) or RDF on CRE. All STSL and ETSL configurations will be blank. Hence, unless stakeholders upload limits, no validation will take place. Eurex will set a limit for all TSL Product Groups, ensuring that at least one limit will be available for each order, quote, or TES trade.

Existing reports will be updated immediately with the launch of T7 Release 10.1. Newly introduced reports will be available with the launch of T7 Release 10.1. Reports that are scheduled to be decommissioned with the TSL enhancements will not be published anymore with the end of the migration phase. Previously published reports will remain available following the standard retention policy.

3.5.2 Simulation

For Simulation the same Migration Process will be followed as for Production. The duration of the migration phase will be two and a half weeks. The last day of the migration phase will be Wednesday 18 May 2022. The new TSL configuration will be operationally enabled Thursday, 19 May 2022.

3.6 Examples

3.6.1 Definition of the Data used in the Examples

The following data setup applies to all examples:

- Clearing Member CM1 clears for Trading Participants TP1 and TP2.
- TP1 has two users TP1US1 and TP1US2 which are both in the same TSL User Group TP1UG1.
- TP2 has two users TP2US1 and TP2US2. TP2US1 is in TSL User Group TP2UG1 and TP2US2 is in no TSL User Group.
- TSL Product Group PG1 contains two products called AAAA and BBBB.
- TSL Product Group PG2 contains one product CCCC.

3.6.2 Standard Use Case with decreasing ETSLs

The use case shows effective TSLs for Trading Participant TP1 and Product Group PG1 given a set of STSLs and ETSLs.

	TSL Class	TSL Product Group	TSL User Group	TSL Type	Trading Participant	User	Product	Limit
Eurex	STSL	PG1		On-book				9,999
Clearing Member CM1	STSL	PG1		On-book	TP1			8,000
Trading Participant TP1	STSL	PG1	TP1UG1	On-book				7,000
Trading Participant TP1	ETSL			On-book		TP1US2	AAAA	0
Effective TSL				On-book	TP1	TP1US1	AAAA	7,000
Effective TSL				On-book	TP1	TP1US1	BBBB	7,000
Effective TSL				On-book	TP1	TP1US2	AAAA	0
Effective TSL				On-book	TP1	TP1US2	BBBB	7,000

3.6.3 Standard Use Case with increasing ETSLs

The use case shows effective TSLs for Trading Participant TP1 and Product Group PG1 given a set of STSLs and ETSLs.

	TSL Class	TSL Product Group	TSL User Group	TSL Type	Trading Participant	User	Product	Limit
Eurex	STSL	PG1		On-book				9,999
Clearing Member CM1	STSL	PG1		On-book	TP1			8,000
Trading Participant TP1	STSL	PG1	TP1UG1	On-book				7,000
Trading Participant TP1	ETSL			On-book		TP1US2	AAAA	7,500
Effective TSL				On-book	TP1	TP1US1	AAAA	7,000
Effective TSL				On-book	TP1	TP1US1	BBBB	7,000
Effective TSL				On-book	TP1	TP1US2	AAAA	7,500
Effective TSL				On-book	TP1	TP1US2	BBBB	7,000

3.6.4 Standard Use Case and User without a TSL User Group

The use case shows effective TSLs for Trading Participant TP2 and Product Group PG1 given a set of STSLs and ETSLs.

	TSL Class	TSL Product Group	TSL User Group	TSL Type	Trading Participant	User	Product	Limit
Eurex	STSL	PG1		On-book				9,999
Clearing Member CM1	STSL	PG1		On-book	TP2			8,000
Trading Participant TP2	STSL	PG1	TP2UG1	On-book				7,000
Trading Participant TP2	ETSL			On-book		TP2US2	BBBB	5,000
Effective TSL				On-book	TP2	TP2US1	AAAA	7,000
Effective TSL				On-book	TP2	TP2US1	BBBB	7,000
Effective TSL				On-book	TP2	TP2US2	AAAA	8,000
Effective TSL				On-book	TP2	TP2US2	BBBB	5,000

3.6.5 Standard Use Case and Product BBBB is moved from PG1 to PG2

The use case shows effective TSLs for Trading Participant TP1 and Product Group PG1 given a set of STSLs and ETSLS. This example illustrates the impact of moving a product from TSL Product Group PG1 to TSL Product Group PG2. Before the change, Product Group PG2 only contains Product CCCC and after the change Product Group PG2 contains CCCC and BBBB.

	TSL Class	TSL Product Group	TSL User Group	TSL Type	Trading Participant	User	Product	Limit
Eurex	STSL	PG1		On-book				9,999
Eurex	STSL	PG2		On-book				9,999
Clearing Member CM1	STSL	PG1		On-book	TP1			8,000
Clearing Member CM1	STSL	PG2		On-book	TP1			8,000
Trading Participant TP1	STSL	PG1	TP1UG1	On-book				7,000
Effective TSL (before)				On-book	TP1	TP1US1	AAAA	7,000
Effective TSL (before)				On-book	TP1	TP1US1	BBBB	7,000
Effective TSL (before)				On-book	TP1	TP1US2	AAAA	7,000
Effective TSL (before)				On-book	TP1	TP1US2	BBBB	7,000
Effective TSL (after)				On-book	TP1	TP1US1	AAAA	7,000
Effective TSL (after)				On-book	TP1	TP1US1	BBBB	8,000
Effective TSL (after)				On-book	TP1	TP1US2	AAAA	7,000
Effective TSL (after)				On-book	TP1	TP1US2	BBBB	8,000

3.7 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the interface manuals and to the *Online Help* in the GUIs.

3.7.1 Public Market and Reference Data Interfaces

Eurex will publish the TSL Product Groups via its Reference Data Interface and via its website.

3.7.2 T7 Admin and Clearer GUI

Trading Participants will be able to configure User TSL Groups, STSLs and ETSLs via the T7 Admin GUI. It will be possible to do configuration either manually or via import/export functionality in the T7 Admin GUI. Please note, that the STSL and ETSL maintenance will no longer be done using the *User Maintenance* view. Instead, there will be an additional view exclusively for STSL and ETSL.

The Clearing Members will be able to configure STSLs either manually or via import/export functionality via the T7 Clearer GUI.

3.7.3 XML Reports

The reports RD110 User Profile Maintenance and RD115 User Profile Status will be enhanced.

Additionally, the following reports will be added:

- RD210 Clearing Member Defined TSL Maintenance
- RD215 Clearing Member Defined TSL Status
- RD220 Trading Member Defined TSL Maintenance
- RD225 Trading Member Defined TSL Status
- RD260 TSL Migration Status

4. Simplified Variance Futures

T7 Release 10.1 will introduce a new simplified handling of Variance Futures, resulting in the reception of only one trade notification and the decommissioning of the functionality receiving first a preliminary and then a final trade notification at different times.

Impacted from the changes is the EURO STOXX 50® Variance Futures (Product ID: EVAR).

4.1 Functional Description

4.1.1 Overview

Currently, T7 creates two types of trade notification for trades in Variance Futures:

- preliminary trade notifications, which are disseminated immediately, and
- final trade notifications, which are generated at the end of the trading day.

For the new simplified Variance Futures, the underlying price information available at trade time will be used for the price conversion from trading into clearing notation. Consequently, it is not required anymore to distinguish between a preliminary and final clearing price, and T7 will provide a single trade notification immediately at the time of the trade, including the final trade price in clearing notation and the underlying price used to calculate the final trade price in clearing notation. No further trade notifications at the end of the trading day will be sent anymore.

Since the clearing notation will be immediately calculated at the time of the trade, it does no longer depend on the current day's underlying settlement price. For on-book trading the calculation will use the last underlying price available at the point in time a match event occurs. For off-book trading, the calculation will be based on a user-provided underlying price (custom underlying price). The entered price will be validated to be within the current intraday daily low and high price of the underlying. Additionally, the discount factor and the Accumulated Return of Modified Variation Margin will be omitted in the conversion. Finally, the standard variance σ_0^2 will be set to the value 400 for all trading days.

4.1.2 Price Conversion

With the introduction of the simplified Variance Futures, price conversion will be adjusted. Immediately at the event of a trade, the trade price will be converted as follows:

$$\hat{P}_{\tau \geq 1, t} = \frac{(T - \tau) \cdot \sigma_{strike}^2 + \tau \cdot \tilde{\sigma}_{real, t}^2(\tau)}{T} - \sigma_0^2 + C$$

where

$\hat{P}_{\tau \geq 1, t}$ = Clearing price (trade price in clearing notation)

σ_{strike}^2 = Volatility strike (trade price in trading notation)

$\tilde{\sigma}_{real, t}^2(\tau)$ = Intraday realized Variance (pertaining to day τ)

σ_0^2 = Standard variance set to 400

C = Clearing price offset

T = Total trading days

τ = Counter of elapsed trading days

At the end of the day, the settlement price will be converted as follows. At that time, the intraday realized variance of the day corresponds to the realized variance of the day.

$$\hat{S}_\tau = \frac{T - \tau}{T} \cdot \sigma_{sttl,\tau}^2 + \frac{\tau}{T} \cdot \sigma_{real}^2(\tau) - \sigma_0^2 + C$$

where

\hat{S}_τ = Settlement price in clearing notation (pertaining to day τ)

$\sigma_{sttl,\tau}$ = Settlement volatility (settlement price in trading notation, pertaining to day τ)

$\sigma_{real}^2(\tau)$ = Realized variance (pertaining to day τ)

σ_0^2 = Standard variance set to 400

C = Clearing price offset

T = Total trading days

τ = Counter of elapsed trading days

For the conversion of on-book trades, the market underlying price $P_{market,t}^{UL}$ will be set to the most recent up-to-date underlying price at the time of a trade event. For TES trades, the market underlying price $P_{market,t}^{UL}$ will be specified by the initiator of a trade (custom underlying price).

With the help of the market underlying price $P_{market,t}^{UL}$ the intraday realized variance $\tilde{\sigma}_{real,t}^2(\tau)$ is calculated by

$$\begin{aligned} \tilde{\sigma}_{real,t}^2(\tau) &= \frac{1}{\tau} \cdot [(\tau - 1) \cdot \sigma_{real}^2(\tau - 1) + \sigma_{day,t}^2(\tau)] \\ &= 10\,000 \cdot \frac{A}{\tau} \cdot \sum_{d=1}^{\tau-1} \left(\ln \left(\frac{S_d^{UL}}{S_{d-1}^{UL}} \right) \right)^2 + 10\,000 \cdot \frac{A}{\tau} \cdot \left(\ln \left(\frac{P_{market,t}^{UL}}{S_{\tau-1}^{UL}} \right) \right)^2 \end{aligned}$$

and the realized variance $\sigma_{real}^2(\tau)$ and variance contribution $\sigma_{day,t}^2(\tau)$ of the current business day are given by

$$\sigma_{real}^2(\tau - 1) = 10\,000 \cdot \frac{A}{\tau - 1} \cdot \sum_{d=1}^{\tau-1} \left(\ln \left(\frac{S_d^{UL}}{S_{d-1}^{UL}} \right) \right)^2$$

and

$$\sigma_{day,t}^2(\tau) = 10\,000 \cdot \frac{A}{\tau} \cdot \left(\ln \left(\frac{P_{market,t}^{UL}}{S_{\tau-1}^{UL}} \right) \right)^2$$

where

- S_d^{UL} denotes the underlying closing price at business day d
- A is the Annualization factor set identical to 252
- Market Underlying Price $P_{market,t}^{UL}$ (pertaining to an event on day τ at time t).

Please note that on the first trading day $\tau = 0$ of a variance futures contract, the realized variance σ_{real}^2 is identical to zero, i.e. $\sigma_{real}^2(0) = 0$ holds.

4.2 Migration Process

4.2.1 Simulation

The EURO STOXX 50® Variance Futures (Product ID: EVAR) was suspended from trading starting as of 04 March 2022. Trading will be resumed with the introduction of T7 Release 10.1 on 27 June 2022. All necessary changes will take place while trading in the product is suspended.

4.2.2 Production

As already announced in Eurex Circular 016/22, the EURO STOXX 50® Variance Futures (Product ID: EVAR) has been suspended from trading starting 28 February 2022. All necessary changes will take place while trading in the product is suspended. Trading will be resumed on 27 June 2022 with the introduction of T7 Release 10.1.

4.3 Impacts on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the interface manuals and to the *Online Help* in the GUIs.

4.3.1 ETI and FIX LF

The following changes will be applied:

- The market underlying price will be provided with the trade notifications/trade capture report.
- The custom underlying price for TES trading will be provided with the TES trade broadcast/trade capture report.

4.3.2 ETI only

The following changes will be applied:

- The initiator of a TES trade for Variance Futures must enter the custom underlying price with the *Enter TES Trade Request*.
- The initiator of a TES trade will be able to modify, if the trade is not finally ratified yet, the custom underlying price for trades in Variance Futures contracts with the *Modify TES Trade Request*.
- The custom underlying price for TES trading will be provided with the *TES broadcast* and the *Approve TES trade broadcast*.

4.3.3 Public Reference Data RDI

The attributes *DiscountFactor*, *AccumulatedReturnModifiedVariationMargin*, *RiskFreeRate* and *OvernightInterestRate* will be removed from the *Variance Futures Status* message.

The message will still include two parameter sets, one for the current day and another one for the previous day. From the parameters of the previous day, only the realised variance is used in the conversion of the trade price. As there are no preliminary trades for Variance Futures anymore, other previous day parameters are not relevant.

4.3.4 T7 Trader GUI

The T7 Trader GUI will introduce a series of modifications and enhancements to support the new simplified handling of Variance Futures.

4.3.5 XML Reports

The following reports will be adjusted:

- TA114 – Variance Futures Parameter: The fields for ARMVM (*armvm*), DiscountFactor (*discFactor*), interest rate (*expRat*) and overnight interest rate (*ovnRat*) will be removed.
- TE545 – Daily TES Maintenance: The report will be enhanced to show the entered custom underlying price which is used in the conversion in the te545Rec record.
- TE810 – T7 Daily Trade Confirmation: The report will be enhanced to show the market underlying price which is used in the conversion in the te810Rec record.

5. Payload Encryption for FIX LF Interface

With T7 Release 10.1, an additional FIX LF connectivity option (via an additional port) will be provided. It will help customers to implement their security requirements by providing transport layer security (payload encryption) for non-fully controlled lines. The payload encryption will be implemented via OpenSSL using TLS 1.2 (with restricted cipher-suites).

Both, Network Access Guide and FIX LF Manual will provide more details.

6. Further Changes and Enhancements

With T7 Release 10.1, Eurex will introduce the following additional changes and enhancements.

6.1 Change of Usage of Field *TradeDate* in ETI TES Status Broadcast

With T7 Release 10.1, the field *TradeDate* in ETI TES Status Broadcast will be modified in its usage: Once a *mandatory* field, it will be an *optional* field now.

6.2 Weekend Connectivity

With T7 Release 10.1, Eurex will introduce the possibility to test the connectivity to the T7 system over weekends. It will be possible to send an http request to the IP address and port of T7 gateways (both ETI and FIX LF).

This will be done e.g. by applying the tool *wget* or the command *curl*, which will be responded by a *400 Bad Request*, thus confirming the connection.

There is no guarantee that connectivity to the T7 system will be always available over weekends.

6.3 Preliminary TRF Parameters File available on CRE and Website

With T7 Release 10.1, the Preliminary TRF Parameters file will be made available via the Common Report Engine (CRE) and on the Eurex website each day at 10:20 am or later. The file naming conventions are:

- On the website: <env>TRF_PARAM_PREL_<YYYYMMDD>.CSV
- On the CRE: <env>FILTRFPR<PUBLI><YYYYMMDD>.CSV.ZIP

The first record shows the table header with the following column headers:

Contract;ConversionMode;AnnualisationFactor;DaysToMaturity;PreliminaryUnderlying;FinalUnderlying;AccruedDistribution;AccruedFunding

The data will be sorted by Contract (Name) ascending.

6.4 Modification of XML Reports TE600 and TE610

With T7 Release 10.1, the following XML reports will be modified to improve the data presentation for TES Aggregation:

- TE600 Eurex EnLight Maintenance
- TE610 Eurex EnLight Best Execution Summary

Both reports will be modified in the following way:

- A new repeating group *respondentDealGrp* with cardinality of *1 ... variable times* will be introduced.
- The field *dealQuoteID* will be moved to the new repeating group *respondentDealGrp*, which will show the quote IDs of multiple respondents.
- A new field *dealQuoteQty* will be introduced in the new repeating group *respondentDealGrp* and will display the executed quantity of a respondent's quote.
Description: This field displays the allocated deal quantity to each respondent.
Format: numeric 13, 4.

6.5 Change of Price Field Format in XML Reports

With T7 Release 10.1, the format of several price fields in various XML reports will change, according to the following tables.

6.5.1 Change to numeric signed 11, 5

The following fields change their format from *numeric signed 9, 5* to *numeric signed 11, 5*:

Field	Reports
agreedPrice	TE590 CLIP Trading Indication
askPrc	TE590 CLIP Trading Indication
basisAsk	TE600 Eurex EnLight Maintenance
basisBid	TE600 Eurex EnLight Maintenance
basketPrc	TE546 Daily Basket TES Maintenance
bidPrc	TE590 CLIP Trading Indication TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
clearingPrc	TE810 T7 Daily Trade Confirmation
dealPrc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
execPrc	TE540 Daily Order Maintenance TE545 Daily TES Maintenance TE546 Daily Basket TES Maintenance TE547 TES Late Approval Report TE548 Daily Compression Maintenance TE590 CLIP Trading Indication TE810 T7 Daily Trade Confirmation TE812 Daily Prevented Self-Matches TE910 T7 Daily Trade Activity
highPrc	TE910 T7 Daily Trade Activity
lastNegotiatedPrc	TE600 Eurex EnLight Maintenance
legexecPrc	TE545 Daily TES Maintenance
limOrdrPrc	TE540 Daily Order Maintenance TE550 Open Order Detail TE810 T7 Daily Trade Confirmation TE812 Daily Prevented Self-Matches
limQuoPrc	TE530 Daily Quote Maintenance
lowPrc	TE910 T7 Daily Trade Activity
newFuturePrc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
newOptionPrc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
newRefPrc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
offerPrc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
prc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
refPrc	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
stopPrice	TE540 Daily Order Maintenance TE550 Open Order Detail

Field	Reports
underlyingPrice	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary

6.5.2 Change to numeric 11, 5 (unsigned)

The following fields had various formats and will change to *numeric 11,5*, i.e. they will not be signed:

Field	Old Format	Reports
underlyingPriceBoundary	numeric 9, 5	TE600 Eurex EnLight Maintenance TE610 Eurex EnLight Best Execution Summary
cshPrcConv	numeric 8, 4	TE545 Daily TES Maintenance

6.6 Modification of XML Reports TR160 and TR161

With T7 Release 10.1, the following XML reports will be modified to improve the data presentation for the maintenance of long code / short code combinations:

- TR160 Identifier Mapping Error
- TR161 Identifier Mapping Status

The TR160 Identifier Mapping Error report will be modified in the following way:

- The following error codes will be decommissioned:
 - Error Code 3 – PNAL. Pending allocations. Client long value has not been provided for Short Code ID.
 - Error Code 4 – AGGR. Aggregated order. Client long value is neither a National ID nor LEI nor an ALGO ID, but the respective Short Code ID stands for several clients.
 - Error Code 19 – Invalid combination. Classification Rule is empty; the Client long value can be only PNAL, AGGR, or NORE.
- The following error code will be introduced in order to respond to deletion instructions where no to-be-deleted match could be found:
 - Error Code 24 – Nothing to delete
- The field *user* will be introduced in *tr160Rec* and will display the user.
- The field *sessionId* will be introduced in *tr160Rec* and will display the session ID.
- The fields *freeText1*, *freeText2*, *freeText3*, *freeText4* will be introduced in *tr160Rec* and will display the text entered by the participant. The field *freeText4* will be blank for Eurex participants.

The TR160 Identifier Mapping Error report will be modified in the following way:

- The report description will be changed to: “This report provides a cumulative overview of valid registered short and long code combinations of the reporting day. The report is provided per business unit and trading venue on a daily basis.”
- A new field *nationalIDCountryCode* will be introduced in *tr161Rec* and will display the country code of the NationalID submitted by the member
Description: This field states the country code of the NationalID submitted by the member.
Format: alphanumeric 2.
- A new field *nationalIDPriority* will be introduced in the new repeating group *tr161Rec* and will display the priority of the NationalID submitted by the member.
Description: This field states the priority of the NationalID submitted by the member
Format: alphanumeric 1.

6.7 New XML Reports TR167 and TR168

With T7 Release 10.1, two new XML reports will be introduced to provide aggregated daily overview over all long code / short code combinations with non-unique or inconsistent short code assignments.

- **TR167 Non-Uniqueness Identifier:** This report provides a cumulative overview of non-unique long codes where more than one short code is registered for the same long code for the reporting day. The report is provided per business unit and trading venue on a daily basis. This report is only available as XML report
- **TR168 Non-Consistency Identifier:** This report provides a cumulative overview of long code modifications to unique short and long code combinations from the previous reporting day to the reporting day. The report is provided per business unit and trading venue on a daily basis. This report is only available as XML report

6.8 Decommission of XML report TR165

With T7 Release 10.1, the XML report TR165 DMA Error Report will be decommissioned.

6.9 Decommission of XML report TT137

With T7 Release 10.1, the temporary XML report TT137 (Temporary Extended Pre-Trade Risk Limit Consumption Report) will be removed.

7. Change Log

No	Date	Log entry
1.2	14 April 2022	Final
1.3	26 April 2022	<ul style="list-style-type: none">• Clarifications regarding Next Generation ETD Contracts in chapter 2• Corrected TSL report names in chapter 3.7.3