1. **Part:** Contract Specifications for Futures Contracts

[...]

1.23 **Subpart: Contract Specifications for Index Total Return Futures Contracts**

The following subpart contains contract specifications for Total Return Futures contracts on indices ("Index Total Return Futures Contracts").

1.23.1 **Subject Matter of Contract**

(1) An Index Total Return Futures Contract is a total return futures contract on a specific index.

(2) Index Total Return Futures Contracts on the following indices are available for trading at the Eurex Exchanges such that the publication of the enclosed institutions shall determine the composition, weighting and calculation:

- EURO STOXX 50® Index (SX5E) (Stoxx Ltd.)

1.23.2 **Obligation for Performance**

After the close of trading in the contract, the seller of an Index Total Return Futures Contract shall pay in cash any difference between the agreed price and the higher final settlement price (Chapter II Part 2 Number 2.23.3 of the Clearing Conditions of Eurex Clearing AG). The purchaser shall pay in cash any difference between the agreed price and the lower final settlement price.

1.23.3 **Term**

For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX), terms expiring on the final settlement day (subsection 1.23.4 Paragraph 2) of the next twenty-one succeeding quarter-end months (March, June, September, December) are available for trading at the Eurex Exchanges.

1.23.4 **Last Trading Day, Final Settlement Day, Close of Trading**

(1) The last trading day of the Index Total Return Futures Contracts shall generally be the trading day immediately preceding the final settlement day provided that such
day is a trading day at the Eurex Exchanges; otherwise, it shall be the trading day immediately preceding such day.

(2) The final settlement day of the Index Total Return Futures Contracts is generally the third Friday of the expiration month provided that such day is a trading day at the Eurex Exchanges; otherwise, it shall be the trading day immediately preceding such day.

(3) For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX) close of trading on the last trading day shall be at 17:25 p.m. CET.

1.23.5 Performance, Cash Settlement

(1) The performance day for Index Total Return Futures Contracts shall be the exchange day after the final settlement day of the contract.

(2) Index Total Return Futures Contracts shall be performed by cash settlement between the Clearing Members and Eurex Clearing AG. Each Clearing Member shall be responsible for handling the cash settlements with the Non-Clearing Members served by it and its own customers; the handling of cash settlements by Non-Clearing Members to their customers is the responsibility of the Non-Clearing Members.

1.23.6 Trading Conventions

1.23.6.1 Exchange Trading

Index Total Return Futures Contracts are traded in Total Return Spread (“TRF Spread”). The TRF Spread is an annualised rate expressed in basis points. The TRF Spread represents the spread financing leg (positive or negative) over a Funding Rate (as defined in Number 1.23.6.3). Trade matching will occur in TRF spread and all subsequent calculations will be performed by the Eurex Exchanges.

Subsequent to trade matching the TRF Spread shall be used in conjunction with both the applicable index level and the time to maturity to calculate a Traded Basis in index points.

The Traded Basis shall be used in conjunction with Accrued Distributions and Accrued Funding to calculate the Traded Futures Price in index points.

The Traded Basis shall be calculated according to Number 1.23.8.1, Accrued Distributions and Accrued Funding according to Number 1.23.8.2 and Traded Futures Price according to Number 1.23.8.3.

1.23.6.2 TRF Spread Gradations

The TRF Spread of Index Total Return Futures Contracts shall be quoted in basis points. The minimum change of the TRF Spread shall be:

- For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX): 0.5 basis points.
1.23.6.3 **Funding Rate**

The Funding Rate applicable to Index Total Return Futures Contracts represents the benchmark overnight funding rate over which the TRF Spread quoted and traded is applicable ("Funding Rate"): 

- For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX) the Funding Rate is Eonia® (as a percentage) provided by EMMI a.i.s.b.l.

1.23.6.4 **Day Count Convention**

The Index Total Return Futures Contracts shall incorporate the time to maturity within the calculation of the Traded Basis in index points. In relation to the calculation of the time to maturity the following day count conventions shall be applicable:

- For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX) the day count convention is Actual/360 (Act/360) which represents the actual number of days in the period referenced for calculation divided by 360 (360 being the Annualisation Factor ("Annualisation Factor").

1.23.6.5 **Days to Maturity, Funding Days**

The Index Total Return Futures Contracts shall incorporate the days to maturity within the calculation of time to maturity (according to Number 1.23.6.4). In relation to the calculation of the days to maturity the following shall be applicable:

\[
\text{Days to maturity}(t) = [\text{expiry date} + x \text{ settlement days}] - [t + x \text{ settlement days}]
\]

Where:

\( t = \text{current trading day} \)

The Index Total Return Futures Contracts shall also incorporate the number of Funding Days within the calculation. The following calculation of the Funding Days shall be applicable ("Funding Days"): 

\[
\text{Funding Days}(t) = [t + x \text{ settlement days}] - [(t - 1) + x \text{ settlement days}]
\]

Where:

\( t = \text{current trading day} \)
\( t - 1 = \text{trading day immediately preceding current trading day} \)

- For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX) days to maturity and Funding Days expressed as actual number of days are based on the settlement days of the underlying component equities (i.e. on a t+2 settlement basis), therefore:

Settlement day means any day on which TARGET2 (the Trans-European Automated Real-time Gross Settlement Express Transfer system) is open for the settlement of payments in Euro

\[ x \text{ settlement days} = 2 \text{ settlement days} \]
For the avoidance of doubt, all terms used in this subpart are only applicable to Index Total Return Futures Contracts.

1.23.7 Trading Modalities

Index Total Return Futures Contracts may be traded in 2 modalities:

- Trade at Index Close (TAIC) where the calculated Traded Basis in index points shall be based on the index close level.
- Trade at Market (TAM) where the calculated Traded Basis in index points shall be based on an index level predetermined and entered by the Exchange Participant (“Custom Index Level”).

The contracts executed as TAIC and TAM trades are fully fungible and the same product code shall be used regardless the modality of trading used (TAIC and TAM).

• For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX) Trade at Index Close (TAIC) shall be available for both continuous trading and trades entered via Eurex Trade Entry Services. Trade at Market (TAM) shall only be available via Eurex Trade Entry Services.

1.23.8 Conversion Parameters and Prices

1.23.8.1 Traded Basis

The traded TRF Spread in basis points is converted to Traded Basis in index points according to the following formulae (“Traded Basis”):

- Trade at Index Close (TAIC):

  \[
  \text{Traded Basis}(t) = \text{Index Close}(t) \times [\text{traded TRF Spread}(t) \times 0.0001] \times (\text{days to maturity}(t) / \text{Annualisation Factor})
  \]

  Where:
  
  \( t = \text{current trading day} \)

  \( \text{Index Close}(t) = \text{the closing level of the index calculated by the respective index provider (“Index Close”) \}

- Trade at Market (TAM)

  \[
  \text{Traded Basis}(t) = \text{Custom Index}(t) \times [\text{traded TRF Spread}(t) / 0.0001] \times (\text{days to maturity}(t) / \text{Annualisation Factor})
  \]

- For Index Total Return Futures on EURO STOXX 50® (Product ID: TESX):

  - Index Close is the daily closing level of the EURO STOXX 50® (SX5E) as calculated by Stoxx Ltd.
Custom Index is an index level of the EURO STOXX 50® (SX5E) as predetermined and entered by the Exchange Participant ("Custom Index").

1.23.8.2 Distributions and Funding

The Traded Futures Price is calculated using the Traded Basis as well as the Accrued Distributions and Accrued Funding. The Accrued Distributions and Accrued Funding are calculated daily and reflect the total amounts since product launch (i.e. the launch of the relevant Index Total Return Futures)

- For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX): product launch is 02 December 2016. All existing and further expirations will always reference this launch date.

1.23.8.2.1 Accrued Distributions

Where an Index Total Return Futures Contract references an underlying price index (an index which excludes distributions made by the underlying constituents – such as dividends) then a calculation is required to determine the distributions.

The following Index Total Return Futures Contracts reference an underlying price index

- Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX).

Accrued Distributions are calculated according to the following formulae:

Accrued Distributions \( (t) = \) Accrued Distributions \( (t-1) + \) Daily Distributions \( (t) \)

Where:

\( t = \) current trading day

\( t-1 = \) trading day immediately preceding current trading day

Daily Distributions are calculated by product from the difference between the value of the current trading day Distribution Index value and the previous trading day Distribution Index value according to the following formulae:

Daily Distributions \( (t) = \) Distribution Index \( (t) – \) Distribution Index \( (t-1) \)

Where:

\( t = \) current trading day

\( t-1 = \) trading day immediately preceding current trading day

Distribution Index\( (t) = \) all dividends and stock distributions of the index’ constituent companies going ex-dividend to and including current trading day \( (t) \) expressed in index points:
• For Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX): Distribution Index is the daily level of EURO STOXX 50® Distribution Point Index (SX5EDD) as calculated by Stoxx Ltd..

Where an Index Total Return Futures Contract references a underlying index which incorporates distributions within its calculation methodology then no additional calculation is required, i.e. Accrued Distributions(t) = 0.

1.23.8.2.2 Accrued Funding

For Index Total Return Futures Contracts the value of Accrued Funding is calculated according to the following formulae:

Accrued Funding (t) = Accrued Funding (t-1) + Daily Funding (t)

Where:

\( t = \) current trading day

\( t-1 = \) trading day immediately preceding current trading day

Daily Funding is calculated by product for the current trading day (t) according to the following formula:

\[
\text{Daily Funding (t)} = \text{Index Close (t-1)} \times \text{Funding Rate (t-1)} \times \left( \frac{\text{Funding Days (t)}}{\text{Annualisation Factor}} \right)
\]

Where:

\( t = \) current trading day

\( t-1 = \) trading day immediately preceding current trading day

1.23.8.3 Traded Futures Price

For Index Total Return Futures Contracts the Traded Basis in index points is converted, in conjunction with Accrued Distributions and Accrued Funding into the Traded Futures Price according to the following formulae:

• Trade at Index Close (TAIC)

\[
\text{Traded Futures Price (t)} = \text{Index Close (t)} + \text{Accrued Distributions (t)} - \text{Accrued Funding (t)} + \text{Traded Basis (t)}
\]

• Trade at Market (TAM)

\[
\text{Traded Futures Price (t)} = \text{Custom Index (t)} + \text{Accrued Distributions (t)} - \text{Accrued Funding (t)} + \text{Traded Basis (t)}
\]

Where:

\( t = \) current trading day
1.23.8.4 Daily Settlement Price

The daily settlement price of Index Total Return Futures Contracts is calculated in index points using the same methodology described in 1.23.8.1 and 1.23.8.3 for Trade at Index Close (TAIC) above. Instead of traded TRF Spread a Daily Settlement TRF Spread shall be determined and used with both the applicable index level and the time to maturity to calculate a Settlement Basis (as defined in Chapter II Part 2 Number 2.23.2 of the Clearing Conditions of Eurex Clearing AG) in index points. The Settlement Basis shall be used in conjunction with Accrued Distributions and Accrued Funding to calculate the daily settlement price in index points.

1.23.8.5 Final Settlement Price

The final settlement price of Index Total Return Futures Contracts is calculated in index points using the same methodology described in 1.23.8.1 and 1.23.8.3 for Trade at Index Close (TAIC) above and according to the following:

(i) At final settlement the Traded Basis is zero as on expiration the time to maturity is zero, and
(ii) Index Close shall be replaced by the Final Settlement Index.

• For Index Total Return Futures on EURO STOXX 50® (Product ID: TESX):
  
  The Final Settlement Index shall be the final settlement price of the Index Futures on the EURO STOXX 50® (Product ID: FESX) as determined under Chapter II Part 2 Number 2.4.2 of the Clearing Conditions of Eurex Clearing AG ("Final Settlement Index").

1.23.9 Market Disruption

1.23.9.1 Market Disruption Event

(1) A market disruption event for Index Total Return Futures Contracts include, but is not limited to the occurrence or existence of at least one of the following situations on an exchange day: (i) disruption in delivery of a given index or Funding Rate by its respective provider ("Disruption in Delivery"); or (ii) disruption in the exchange trading for listed derivatives on a given index ("Disruption in the Exchange Trading for Listed Derivatives").

(2) For Index Total Return Futures on EURO STOXX 50® (Product ID: TESX) the following may constitute a market disruption event regarding Disruption in Delivery:

a) Stoxx Ltd. does not publish the effective EURO STOXX 50® Distribution Point Index (SX5EDD) level prior to the start of trading;

b) Stoxx Ltd. does publish the effective EURO STOXX 50® Distribution Point Index (SX5EDD) level prior to the start of trading but then subsequently amends and re-publishes after the start of trading;

c) EMMI a.i.s.b.l. as index provider does not calculate and publish an Eonia® level for the previous settlement day prior to the start of trading or subsequently amends and re-publishes after the start of trading;

d) Stoxx Ltd. does not publish a EURO STOXX 50® (SX5E) Index Close:
e) Stoxx Ltd. does publish a EURO STOXX 50® (SX5E) Index Close but then subsequently amends and re-publishes the Index Close.

(3) For Index Total Return Futures on EURO STOXX 50® (Product ID: TESX) the following may constitute a market disruption event regarding Disruption in the Exchange Trading for Listed Derivatives:
   a) Index Total Return Futures Contracts on EURO STOXX 50® (Product ID: TESX) are not open for all or part of the day;
   b) The Eurex Exchanges are not open for trading on a scheduled exchange day during the period between 16:30 and 17:30 CET;

(4) Independent from the Paragraphs 1 – 3 of this section, the Management Boards of the Eurex Exchanges may determine situations where orderly price or spread determination is not possible and a market disruption event has occurred.

1.23.9.2 Market Disruption Calculation of Input Parameters

(1) Disruptions effecting the parameters required for the pricing calculation may lead to a market disruption event as stipulated in Number 1.23.9.1. The following methodology regarding the calculation of input parameters leading to a market disruption shall apply:

For Index Total Return Futures Contracts in order to calculate both the Traded Futures Price for Trade at Index Close (TAIC) and the daily settlement price on trading day (t) the following input parameters are required:

• Prior to trading
  Distribution Index (t) and Funding Rate (t-1)

• End of day
  Index Close (t) and Daily Settlement TRF Spread (t)

(2) For Index Total Return Futures Contracts the criteria mentioned in Paragraph 1 of this Section regarding the calculation of a market disruption event specifically mean:

a) Distribution Index (t)

If the index provider does not publish the effective Distribution Index prior to the start of trading then the Management Boards of the Eurex Exchanges may at their discretion delay the start of trading for that contract until either the index provider delivers the Distribution Index or it is otherwise calculated by the Eurex Exchanges.

If the index provider does publish the effective Distribution Index prior to the start of trading but then subsequently amends and re-publishes after the start of trading, then the amended Distribution Index shall be used. In addition the amended
Distribution Index shall be used to calculate the difference applicable to impacted trades in relation to their originally calculated Traded Futures Price and determine the corresponding adjustment based on the amended Distribution Index. These adjustments shall be determined on the next trading day.

b) Funding Rate (t-1)

If the provider of the benchmark overnight funding rate does not calculate and publish the overnight Funding Rate level prior to start of trading, or subsequently amends and re-publishes, then the last overnight Funding Rate available prior to start of trading shall be used.

c) Index Close (t)

If the index provider does not publish an Index Close at the expected time then the Management Boards of the Eurex Exchanges may at their discretion delay the input of the Index Close for that contract up to the end of the post trade period, until either the index provider delivers the Index Close or the Management Boards of the Eurex Exchanges determine the Index Close.

If the Index Close is unavailable at the end of the post trade period the last available index value shall be used.

If the index provider does publish an Index Close but then subsequently amends and re-publishes the Index Close prior to the end of the post trade period then the amended Index Close shall be used to recalculate the daily settlement price. In addition the amended Index Close shall be used to calculate the difference applicable to impacted trades in relation to their originally calculated Traded Futures Price and determine the corresponding adjustment based on the amended Index Close. These adjustments shall be determined on the next trading day.

d) Daily Settlement TRF Spread (t)

If the Index Total Return Futures are not open for trading on the Eurex Exchanges for all or part of the day then the Management Boards of the Eurex Exchanges may at their discretion determine the Daily Settlement TRF Spread based upon either the previous Daily Settlement TRF Spread or the last spread determined from available market data or at a level determined by the Management Boards of the Eurex Exchanges to reflect the fair value.

1.23.10 Distribution Recovery Event

(1) For Index Total Return Futures Contracts that use a Distribution Index to determine Accrued Distributions the declared distributions, such as dividends, are incorporated into the Distribution Index calculation on the ex-date of such a distribution. Subsequently if, in relation to a declared distribution, which is incorporated into the Distribution Index:

a) the actual amount deemed by the Eurex Exchanges as paid or to be paid differs from the declared distribution,

b) no such payment is deemed by the Eurex Exchanges as made or to be made,
c) a declared distribution is subject to a) or b) above but is subsequently deemed by the Eurex Exchanges that the actual amount shall or has been paid, then the Management Boards of the Eurex Exchanges determine whether the actual amount paid differs to the declared distribution and a distribution recovery event has occurred. A declared distribution may be subject to one or more distribution recovery events.

(2) In the event of a distribution recovery event, the Management Boards of the Eurex Exchanges may at their discretion determine an appropriate adjustment. This adjustment shall be based upon:

a) the open positions at the close on the trading day immediately preceding the ex-date of the declared distribution,
b) the difference in value between the declared distribution and the actual amount deemed as paid or to be paid by the Eurex Exchanges,
c) the value of any adjustments previously made due to a distribution recovery event,
d) the treatment if any of such a distribution recovery event by the index provider of the Distribution Index.

In the event that the declared distribution is greater than the actual amount deemed as paid or to be paid by the Eurex Exchanges and where no prior adjustment has been made, then the holders of long open positions, as held at the close of business on the exchange day prior to the ex-date of a distribution subject to Paragraph 1 lit. a) of this Section shall be debited by the adjustment and the holders of short positions shall be credited. These adjustments shall be applied on the next trading day following the determination of a distribution recovery event and the calculation of the relevant adjustment.

Where a previous adjustment has been made then the Management Boards of the Eurex Exchanges shall determine the application of any subsequent adjustment to holders of open positions, as held at the close of business on the exchange day prior to the ex-date of a distribution subject to Paragraph 1 lit. a) of this Section.

The Management Boards of the Eurex Exchanges shall determine the date any such adjustment should be made. In particular the Management Boards of the Eurex Exchanges may at its discretion apply distribution recovery events up to and including 100 days after the Index Total Return Futures Contracts expiration date.

[...]

Annex C in relation to Contract Specifications:

Trading Hours Futures Contracts

[...]
Index Futures Contracts

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All times CET

[...]

Annex E Allocation Scheme (Part A Section 2.5 Paragraph 3 of the Conditions for Trading) and Path Priority (Part A Section 2.5 Paragraph 2 of the Conditions for Trading) *

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