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BORSA İSTANBUL A.Ş.
Debt Securities Market Directorate

**Subject: Announcement on amendments regarding
Debt Securities Market Procedure**

Dear Member,

Trading principles regarding lease certificates based on BIST TLREFK Index to be issued by Republic of Turkey Ministry of Treasury and Finance are included in Debt Securities Market Procedure (Procedure) and amendments are made to the regulations specified in Annex 5 of the Procedure regarding the pre trade risk management application. Regulatory amendments made in the Procedure will enter into effect on September 10, 2025.

The amendments made to the Procedure are listed in “Annex: Comparison Table of Amendments Regarding Debt Securities Market Procedure”. The updated version of the Procedure could be reached on the effective date at “Procedures” link under the title of “Related Pages” within “Corporate / Regulations” tab at Borsa İstanbul website.

For your information and further action.

Sincerely,

Korkmaz ERGUN
CEO
Board Member

ANNEX: COMPARISON TABLE OF AMENDMENTS REGARDING DEBT SECURITIES MARKET PROCEDURE

OLD REGULATION	NEW REGULATION
<p>4 DEFINITIONS AND ABBREVIATIONS</p> <p>(1) For the purposes and in the context of this Procedure:</p> <p>...</p> <p>r) “TLREF” stands for Turkish Lira Overnight Reference Rate; and</p> <p>s) “BIST TLREF Index” stands for index calculated in order to track return on TLREF; and</p> <p>ş) “Member” refers to an investment firm authorized to trade at Debt Securities Market; and</p> <p>ţ) “Value Date” refers to settlement date of transactions at Debt Securities Market.</p>	<p>4 DEFINITIONS AND ABBREVIATIONS</p> <p>(1) For the purposes and in the context of this Procedure:</p> <p>...</p> <p>r) “TLREF” stands for Turkish Lira Overnight Reference Rate; and</p> <p>s) <u>“TLREFK” stands for Turkish Lira Overnight Participation Reference Rate; and</u></p> <p>ş) “BIST TLREF Index” stands for index calculated in order to track return on TLREF; and</p> <p><u>t) “BIST TLREFK Index” stands for index calculated in order to track return on TLREFK; and</u></p> <p>u) “Member” refers to an investment firm authorized to trade at Debt Securities Market; and</p> <p>ii) “Value Date” refers to settlement date of transactions at Debt Securities Market.</p>
<p>9.1.2 Capital Market Instruments Tradable in Outright Purchases and Sales Market</p> <p>...</p> <p>(2) In the Market, except for debt securities with coupon payments based on TLREF or TLREF index, if the next coupon rate of a capital market instrument traded over clean price is not reported to the Exchange by 17:30 hours one trading day before the coupon payment date, then, trading of that capital market instrument may be suspended by the CEO.</p> <p>...</p>	<p>9.1.2 Capital Market Instruments Tradable in Outright Purchases and Sales Market</p> <p>...</p> <p>(2) In the Market, except for debt securities with coupon payments based on TLREF, <u>TLREFK, BIST TLREF index or BIST TLREFK index,</u> if the next coupon rate of a capital market instrument traded over clean price is not reported to the Exchange by 17:30 hours one trading day before the coupon payment date, then, trading of that capital market instrument may be suspended by the CEO.</p> <p>...</p>

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9.1.5 Price Types, Order Entry Methods and Price and Yield Ticks Applicable in Outright Purchases and Sales Market

...

(2) Price of capital market instrument excluding its accrued interest or accumulated rent is called as clean price, while its price including its accrued interest or accumulated rent is called as dirty price. Accrued interest or accumulated rent refers to the amount of periodical coupon interest or yield corresponding to the number of days starting from the date of issue in the initial coupon period and from the last coupon payment date to the value date in other coupon periods. (Method of calculation of accrued interest or accumulated rent for debt securities with coupon payments on the basis of TLREF ~~or~~ BIST TLREF index which are traded in clean price is separately described in Annex-1 attached hereto.) Settlement price is the price used in calculating settlement value of transaction, and is calculated by taking the inflation coefficient into consideration for inflation-indexed government bonds. It is equal to dirty price for other capital market instruments.

(3) ...

b) Capital market instruments for which orders are submitted over clean price:

Fixed rate bonds denominated in Turkish Lira or foreign currency, and fixed yield lease certificates denominated in Turkish Lira or foreign currency, and floating rate bonds denominated in Turkish Lira with fixed initial coupon interest rate, and debt securities with coupon payments on the basis of TLREF ~~or~~ BIST TLREF index issued by the Treasury which are issued in accordance with Type 10 security type as shown in Annex-1 attached hereto (Clean price, except for inflation coefficient, is used for CPI indexed government bonds ~~started to be issued by the Treasury in February 2007.~~)

c) Capital market instruments for which orders are submitted over dirty price:

CPI indexed annuity government bonds (except for inflation contribution), and stripped coupons of bonds with coupons, and floating

9.1.5 Price Types, Order Entry Methods and Price and Yield Ticks Applicable in Outright Purchases and Sales Market

...

(2) Price of capital market instrument excluding its accrued interest or accumulated rent is called as clean price, while its price including its accrued interest or accumulated rent is called as dirty price. Accrued interest or accumulated rent refers to the amount of periodical coupon interest or yield corresponding to the number of days starting from the date of issue in the initial coupon period and from the last coupon payment date to the value date in other coupon periods. (Method of calculation of accrued interest or accumulated rent for debt securities with coupon payments on the basis of TLREF, **TLREFK**, BIST TLREF index ~~or~~ **BIST TLREFK index** which are traded in clean price is separately described in Annex-1 attached hereto.) Settlement price is the price used in calculating settlement value of transaction, and is calculated by taking the inflation coefficient into consideration for inflation-indexed government bonds. It is equal to dirty price for other capital market instruments.

(3) ...

b) Capital market instruments for which orders are submitted over clean price:

Fixed rate bonds denominated in Turkish Lira or foreign currency, and fixed yield lease certificates denominated in Turkish Lira or foreign currency, and floating rate bonds denominated in Turkish Lira with fixed initial coupon interest rate, and debt securities with coupon payments on the basis of TLREF, **TLREFK**, BIST TLREF index ~~or~~ **BIST TLREFK index** issued by the Treasury which are issued in accordance with Type 10 security type as shown in Annex-1 attached hereto (Clean price, except for inflation coefficient, is used for CPI indexed government bonds.)

c) Capital market instruments for which orders are submitted over dirty price:

CPI indexed annuity government bonds (except for inflation contribution), and stripped coupons of bonds with coupons, and floating

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<p>rate bonds with floating initial coupon interest, and foreign currency denominated floating rate bonds with unknown initial coupon interest rate, gold bonds and gold denominated lease certificates issued by the Treasury and real estate certificates (Dirty price, except for inflation contribution, is used for stripped coupons and principals of CPI indexed government bonds started to be issued by the Treasury in February 2007.)</p> <p>...</p> <p>(5) In the Market, except for those that are identified and published by the Executive Management separately for capital market instruments, a tick of TRY 0.001 is applied in orders submitted over price, and an increment of 0.01% is applied in orders submitted over yield. A tick of TRY 0.0001 is applied in orders submitted for periods with uncertain coupon interest rate of debt securities with coupon payments on the basis of TLREF or BIST TLREF index, which are traded over clean price and a tick of TRY 0.00001 is applied in orders submitted for gold bonds and gold denominated lease certificates issued by the Treasury.</p>	<p>rate bonds with floating initial coupon interest, and foreign currency denominated floating rate bonds with unknown initial coupon interest rate, gold bonds and gold denominated lease certificates issued by the Treasury and real estate certificates (Dirty price, except for inflation contribution, is used for stripped coupons and principals of CPI indexed government bonds.)</p> <p>...</p> <p>(5) In the Market, except for those that are identified and published by the Executive Management separately for capital market instruments, a tick of TRY 0.001 is applied in orders submitted over price, and an increment of 0.01% is applied in orders submitted over yield. A tick of TRY 0.00001 is applied in orders submitted for gold bonds and gold denominated lease certificates issued by the Treasury.</p>
<p>9.7.2 Capital Market Instruments Tradable in Watchlist Market</p> <p>...</p> <p>(2) In the Market, except for securities with coupon payments based on TLREF or TLREF index, if the next coupon rate of a capital market instrument traded over clean price is not reported to the Exchange by 17:30 hours one trading day before the coupon payment date, then, trading of that capital market instrument may be suspended by the CEO.</p> <p>...</p>	<p>9.7.2 Capital Market Instruments Tradable in Watchlist Market</p> <p>...</p> <p>(2) In the Market, except for securities with coupon payments based on TLREF, <u>TLREFK</u>, BIST TLREF index <u>or BIST TLREFK index</u>, if the next coupon rate of a capital market instrument traded over clean price is not reported to the Exchange by 17:30 hours one trading day before the coupon payment date, then, trading of that capital market instrument may be suspended by the CEO.</p> <p>...</p>

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ANNEX 1- PRICE TYPES AND PRICE AND YIELD CALCULATIONS

1- DEFINITIONS

...
Accrued Interest or Accumulated Rent: Refers to the amount of periodic coupon interest or yield corresponding to the number of days passed (GGS) from the issue date (i.e. dated date) in the first coupon period or from the last coupon payment date in the other coupon periods to the value date. (Method of calculation of accrued interest or accumulated rent for debt instruments with coupon payments on the basis of TLREF rate or BIST TLREF index which are traded over clean price is separately described in the Formulations table.)

...
Index Coefficient: Refers to a coefficient calculated by dividing BIST TLREF index value taken as a base at the value date by BIST TLREF index value taken as a base for issue date (i.e. dated date) in the first coupon period and by BIST TLREF index value taken as a base at the previous coupon date for the subsequent coupon periods, and by applying exponential smoothing thereon.

2- FORMULATIONS

No	Formulations
...	
4.2	<p><i>Accrued Interest or Accumulated Rent</i></p> $= \sum_{i=k}^{T-1} \left(\frac{n_i * TLREFORAN_{i-m}}{YGS} \right) + \frac{Annual\ Additional\ Yield * GGS}{YGS}$ <p>If value date coincides with coupon payment date or maturity starting date (dated date), the amount of accrued interest/accumulated rent is equal to zero.</p>
4.3	<p><i>Accrued Interest or Accumulated Rent</i></p> $= \left(\left(\prod_{i=k}^{T-1} \left(1 + \frac{n_i * TLREFORAN_{i-m}}{YGS * 100} \right) - 1 \right) * 100 \right) + \frac{Annual\ Additional\ Yield * GGS}{YGS}$

ANNEX 1- PRICE TYPES AND PRICE AND YIELD CALCULATIONS

2- DEFINITIONS

...
Accrued Interest or Accumulated Rent: Refers to the amount of periodic coupon interest or yield corresponding to the number of days passed (GGS) from the issue date (i.e. dated date) in the first coupon period or from the last coupon payment date in the other coupon periods to the value date. (Method of calculation of accrued interest or accumulated rent for debt instruments with coupon payments on the basis of TLREF, **TLREFK**, BIST TLREF index or BIST TLREFK index, which are traded over clean price is separately described in the Formulations table.)

...
Index Coefficient: Refers to a coefficient calculated by dividing **REFENDEKS** value taken as a base at the value date by **REFENDEKS** value taken as a base for issue date (i.e. dated date) in the first coupon period and by **REFENDEKS** value taken as a base at the previous coupon date for the subsequent coupon periods, and by applying exponential smoothing thereon.

2- FORMULATIONS

No	Formulations
...	
4.2	<p><i>Accrued Interest or Accumulated Rent</i></p> $= \sum_{i=k}^{T-1} \left(\frac{n_i * REFORAN_{i-m}}{YGS} \right) + \frac{Annual\ Additional\ Yield * GGS}{YGS}$ <p>If value date coincides with coupon payment date or maturity starting date (dated date), the amount of accrued interest/accumulated rent is equal to zero.</p>
4.3	<p><i>Accrued Interest or Accumulated Rent</i></p> $= \left(\left(\prod_{i=k}^{T-1} \left(1 + \frac{n_i * REFORAN_{i-m}}{YGS * 100} \right) - 1 \right) * 100 \right) + \frac{Annual\ Additional\ Yield * GGS}{YGS}$

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	If value date coincides with coupon payment date or maturity starting date (dated date), the amount of accrued interest/accumulated rent is equal to zero.		If value date coincides with coupon payment date or maturity starting date (dated date), the amount of accrued interest/accumulated rent is equal to zero.

5.2	$Index\ Coefficient = \left(\frac{TLREFENDEKS_{T-m}}{TLREFENDEKS_{k-m}} \right)^{\frac{GGS}{EG}}$ <p>If coupon payment date is not a business day, for transactions with value date equivalent to the first business date after the coupon payment date;</p> $Index\ Coefficient = \left(\frac{TLREFENDEKS_{(T-m)}}{TLREFENDEKS_{(k-m)-1\ business\ date}} \right)^{\frac{GGS}{EG}}$	5.2	$Index\ Coefficient = \left(\frac{REFENDEKS_{T-m}}{REFENDEKS_{k-m}} \right)^{\frac{GGS}{EG}}$ <p>If coupon payment date is not a business day, for transactions with value date equivalent to the first business date after the coupon payment date;</p> $Index\ Coefficient = \left(\frac{REFENDEKS_{(T-m)}}{REFENDEKS_{(k-m)-1\ business\ date}} \right)^{\frac{GGS}{EG}}$

Abbreviations		Definitions	
			...
REF		Reference index announced by the Treasury	
TLREFENDEKS		BIST TLREF Index	
TLREFORAN		TLREF Turkish Lira Overnight Reference Rate	
n_i		As of i business day, number of calendar days between next business day and day i	
		...	
m		Delay parameter showing the value of how many business days before will be taken as a base for TLREF rate or TLREF index to be referenced	
		...	
		...	
Abbreviations		Definitions	
			...
REF		Reference index announced by the Treasury	
<u>REFENDEKS</u>		<u>BIST TLREF Index or BIST TLREFK Index,</u>	
<u>REFORAN</u>		<u>TLREF or TLREFK,</u>	
n_i		As of i business day, number of calendar days between next business day and day i	
		...	
m		Delay parameter showing the value of how many business days before will be taken as a base for <u>REFORAN</u> or <u>REFENDEKS</u> to be referenced	
		...	
		...	

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3- PRICES, YIELDS AND FORMULATIONS USED IN ORDER ENTRY SEPARATED ACCORDING TO INFORMATION ON TYPES OF SECURITIES

- ...
- Type 1: Stripped principal sums of discounted bonds and bonds with coupon. For instance: treasury bills, discounted government bonds and commercial papers.
 - Type 2: Debt securities with fixed coupons. For instance: Fixed interest bonds denominated in TRY and foreign currency / Fixed yield lease certificates denominated in TRY
Type 2A) Securities with regular coupon payment periods
Type 2B) Securities with irregular first coupon payment period
Type 2C) Securities with irregular last coupon payment period
Type 2D) Securities with irregular first and last coupon payment periods
Type 3: Variable interest rate securities
Type 3A) Securities with next coupon rate known (full security). For instance: Variable interest rate bonds denominated in TRY with first coupon interest rate fixed beforehand
Type 3B) Securities with next coupon rate unknown (full security) and coupons of stripped securities, gold bonds and gold denominated lease certificates issued by the Ministry of Treasury and Finance. For instance: Stripped coupons of bonds with coupons, variable interest rate bonds with first coupon interest rate not fixed
 - Type 4: Stripped principal sums and coupons of inflation indexed securities. For instance: CPI indexed annuity government bonds, and coupons and principal sums of CPI indexed bonds
 - Type 5: The full non-stripped inflation indexed securities
 - Type 6: Euro Bond (USD)*
 - Type 7: Euro Bond (EUR)*
 - Type 8: Bonds with Irregular Cash Flow
Type 8A) Securities with irregular periods traded over clean price
Type 8B) Securities with irregular periods traded over dirty price
 - Type 10: Securities with coupon payments on the basis of ~~TLREF~~ or ~~TLREF index~~**
Type 10A) Securities using ~~TLREF~~ arithmetic average
Type 10B) Securities using ~~TLREF~~ compounded interest rates
Type 10C) Securities using ~~TLREF index~~ securities

3- PRICES, YIELDS AND FORMULATIONS USED IN ORDER ENTRY SEPARATED ACCORDING TO INFORMATION ON TYPES OF SECURITIES

- ...
- Type 1: Stripped principal sums of discounted bonds and bonds with coupon. For instance: treasury bills, discounted government bonds and commercial papers.
 - Type 2: Debt securities with fixed coupons. For instance: Fixed interest bonds denominated in TRY and foreign currency / Fixed yield lease certificates denominated in TRY
Type 2A) Securities with regular coupon payment periods
Type 2B) Securities with irregular first coupon payment period
Type 2C) Securities with irregular last coupon payment period
Type 2D) Securities with irregular first and last coupon payment periods
Type 3: Variable interest rate securities
Type 3A) Securities with next coupon rate known (full security). For instance: Variable interest rate bonds denominated in TRY with first coupon interest rate fixed beforehand
Type 3B) Securities with next coupon rate unknown (full security) and coupons of stripped securities, gold bonds and gold denominated lease certificates issued by the Ministry of Treasury and Finance. For instance: Stripped coupons of bonds with coupons, variable interest rate bonds with first coupon interest rate not fixed
 - Type 4: Stripped principal sums and coupons of inflation indexed securities. For instance: CPI indexed annuity government bonds, and coupons and principal sums of CPI indexed bonds
 - Type 5: The full non-stripped inflation indexed securities
 - Type 6: Euro Bond (USD)*
 - Type 7: Euro Bond (EUR)*
 - Type 8: Bonds with Irregular Cash Flow
Type 8A) Securities with irregular periods traded over clean price
Type 8B) Securities with irregular periods traded over dirty price
 - Type 10: Securities with coupon payments on the basis of **REFORAN** or **REFENDEKS****
Type 10A) Securities using **REFORAN** arithmetic average
Type 10B) Securities using **REFORAN** compounded interest/**return** rates
Type 10C) Securities using **REFENDEKS** securities

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either, variable interest rate bonds and real estate certificates denominated in foreign currency		either, variable interest rate bonds and real estate certificates denominated in foreign currency	
* If first and last periods are irregular in Euro bonds, formulations in Type 2 are used ** Formulations in Type 3A are used for periods with a certain coupon rate of securities with coupon payments on the basis of TLREF or TLREF index.		* If first and last periods are irregular in Euro bonds, formulations in Type 2 are used ** Formulations in Type 3A are used for periods with a certain coupon rate of securities with coupon payments on the basis of <u>REFORAN</u> or <u>REFENDEKS</u> .	

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<p>ANNEX 5- PRE-TRADE RISK MANAGEMENT APPLICATION</p> <p>1. Pre-Trade Risk Management – General Structure</p> <p>...</p> <p>BISTECH Pre-Trade Risk Management application is a risk management system wherein a module integrated to matching engine containing orders and trades and Takasbank real-time risk management module (RTM) are operating in an integrated manner through real-time data exchange.</p> <p>Figure</p> <p>With PTRM application, orders which successfully pass the pre-order risk controls are, if accepted, inserted in order book, and taken into order matching assessment. Orders which cannot pass the risk controls are not inserted in order book, and are cancelled.</p> <p>Risk controls and their consequences may be tracked by PTRM Graphic User Interface (PTRM GUI).</p> <p>Exchange Members may connect to PTRM GUI application via Remote Access Network (UEA). For eligibility to enter in PTRM via GUI, users are identified and authorized by the Exchange. PTRM users are required to have completed any one of PTRM application trainings organized by Equity Market, Derivatives Market or Debt Securities Market.</p> <p>...</p> <p>3. Risk Group Controls (User Limits)</p> <p>... The following controls are made by the limits determined at the level of these risk groups:</p> <ul style="list-style-type: none"> a) Pre-order Risk Checks <ul style="list-style-type: none"> • Maximum order size • Restricted Instruments b) Post-order & at-trade Risk Controls 	<p>ANNEX 5- PRE-TRADE RISK MANAGEMENT APPLICATION</p> <p>1. Pre-Trade Risk Management – General Structure</p> <p>...</p> <p>With PTRM application, orders which successfully pass the pre-order risk controls are, if accepted, inserted in order book, and taken into order matching assessment. Orders which cannot pass the risk controls are not inserted in order book, and are cancelled.</p> <p><u>Configuring risk controls in the system and monitoring the results of these defined risk controls are carried out through PTRM Graphic User Interface (PTRM GUI) and/or PTRM Application Programming Interface (PTRM API).</u></p> <p>For eligibility to enter in PTRM via GUI <u>and/or API</u>, users are identified and authorized by the Exchange. PTRM users are required to have completed any one of PTRM application trainings organized by Equity Market, Derivatives Market or Debt Securities Market.</p> <p>...</p> <p>3. Risk Group Controls (User Limits)</p> <p>... The following controls are made by the limits determined at the level of these risk groups:</p> <ul style="list-style-type: none"> a) Pre-order Risk Checks <ul style="list-style-type: none"> • Maximum <u>buy</u> size <u>and maximum sell size</u> • Restricted Instruments • <u>Price tolerance</u>
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- Position risk limits
- Order rate limit

...

Figure: Risk Group Structure

3.1 Pre-order Risk Controls

3.1.1 Maximum Order-Size Control

An order sent by users included in the risk group undergoes the following maximum order size control before it is accepted to the system or before order amendment:

- Order Size \geq ~~Maximum Order Size~~ \rightarrow Order is rejected
- Order Size $<$ ~~Maximum Order Size~~ \rightarrow Order is accepted

~~Maximum order size stands for maximum quantity of an order. Limit to be used in maximum order size control may be determined at instrument class and instrument type level under a risk group.~~

3.1.2 Restricting Instruments for a Risk Group

Tradable instruments by users included in a risk group may be restricted. ~~In case of restriction~~, users may trade only in instruments belonging to instrument type and instrument class for which a risk limit is defined, and may not trade in instruments belonging to instrument types and/or classes not assigned to a particular risk group.

b) Post-order & At-trade Risk Controls

- Position risk limits
- Order rate limit
- **Duplicate order interval/limit**

...

3.1 Pre-order Risk Controls

3.1.1 Maximum Order-Size Control

An order sent by users included in the risk group undergoes the following maximum **buy size and maximum sell** size control before it is accepted to the system or before order amendment

- Order Size \geq **Maximum Buy or Sell Size** \rightarrow Order is rejected
- Order Size $<$ **Maximum Buy or Sell Size** \rightarrow Order is accepted

Limit to be used in maximum order size control may be determined at instrument class and instrument type level under a risk group.

3.1.2 Restricting Instruments for a Risk Group

Tradable instruments by users included in a risk group may be restricted. **If “included” option is selected in the restricted instruments column,** users may trade only in instruments belonging to instrument type and instrument class for which a risk limit is defined, and may not trade in instruments belonging to instrument types and/or classes not assigned to a particular risk group. **If only an exchange limit is defined for an**

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instrument and no limit is defined by the member, orders cannot be entered in this instrument when this option is selected.

If “excluded” option is selected, users in the risk group cannot enter orders on instruments whose risk limit is defined by the member, and orders / transactions are allowed on other instruments. Orders are allowed for instruments where the Exchange limit is defined but the member limit is not defined.

3.1.3 Price Tolerance Limit

Price Tolerance Limit can be set by members for rejecting orders with a price deviance which is equal to or more than the determined price tolerance percentage calculated over the control price. If there is a value (in percentage) set for the price limit, PTRM checks the price of new orders and the modified orders before admitting them to the system, according to the price controls stated below:

- Order Price \leq Control Price - (Price Tolerance Limit * Control Price)→order is rejected**
- Order Price \geq Control Price + (Price Tolerance Limit * Control Price)→order is rejected**
- Control Price - (Price Tolerance Limit * Control Price) < Order Price < Control Price + (Price Tolerance Limit * Control Price)→order is accepted**

Following are considered as the control price in below order, depending on their existence in the system:

- Last Match Price**
- Base Price**
- Best bid price or best ask price**
- Reference Price**

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3.2 At-trade Risk Controls

3.2.1 Position Risk Limits

Position risk limit checks are performed by the following ~~nine~~ different risk calculations taking into account the orders placed in the order book and the trades executed from the beginning of the day by the users included in the risk group:

- A: Open Buy Orders
 B: Open Sell Orders
 C: Traded Bought
 D: Traded Sell
 E: Traded Net $E = |C-D|$
~~F: Total Buy $F = A+C$~~
~~G: Total Sell $G = B+D$~~
~~H: Total Net Buy $H = C-D+A$~~
~~I: Total Net Sell $I = D-C+B$~~

...

Defining a risk limit as zero means that the related limit is infinite, and the system does not perform any control for a risk limit defined as zero. If the instrument type or instrument class limits determined as zero are moved to a value other than zero during the day, ~~then, unexpected consequences may be faced in limit calculations of the system. For this reason, instrument type or instrument class limits determined as zero should not be changed during the day.~~

...

3.2 At-trade Risk Controls

3.2.1 Position Risk Limits

Position risk limit checks are performed by the following **11** different risk calculations taking into account the orders placed in the order book and the trades executed from the beginning of the day by the users included in the risk group:

- A: Open Buy Orders
 B: Open Sell Orders
 C: Traded Bought
 D: Traded Sell
 E: Traded Net $E = |C-D|$
F: Total Open Orders $F = A+B$
G: Total Buy $G = A+C$
H: Total Sell $H = B+D$
I: Total Short Sell
J: Total Net Buy $J = C-D+A$
K: Total Net Sell $K = D-C+B$

...

Defining a risk limit as zero means that the related limit is infinite, and the system does not perform any control for a risk limit defined as zero. If the instrument type or instrument class limits determined as zero are moved to a value other than zero during the day, **PTRM starts to publish consumption data by taking into account the transactions that take place since the beginning of the day. If the non-zero value defined during the day is less than the current consumption at the time of definition, the blocking of the risk group occurs.**

...

3.2.3 Duplicate Order Limit

Duplicate order limit is the limit set for the number of orders for the same instrument under the related instrument class and/or instrument type with the same quantity, price and side (buy/sell) of

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<p>3.3 Electronic Mail (e-mail) Warnings</p> <p>If the risk of a risk group reaches or exceeds the predetermined notification levels, an e-mail message is sent to all recipients named in the notification list determined for that risk group by the related member. There are three types of notification levels:</p> <ul style="list-style-type: none"> • Notices: The lowest level of warning. • Warnings: The highest level of warning. • Breaches: Risk limits are reached or exceeded. <p>Each limit identified for a risk group generates only one notice, warning and breach e-mail in a trading day. If a limit is changed during a trading day, then, this limitation is reset, and the limit will generate again one e-mail alert for each notification level, regardless of the previously sent messages. Order rate limit generates only breach e-mails. It does not generate notice or warning e-mails. An e-mail warning is sent in each breach of order rate limit.</p> <p>...</p> <p>3.5 Blocking of Risk Group</p> <p>...</p> <p>A risk group may also be manually blocked by the Exchange or a member. A risk group blocked manually may only be unblocked again manually.</p>	<p><u>a user for a certain time interval (in seconds). In case of a breach in the duplicate order limit, related risk group is blocked in the instrument type or class and the users under the risk group are not allowed to submit new orders to any of the instruments under this instrument type/class.</u></p> <p><u>Duplicate order breach is not removed automatically. A blocked risk group can be unblocked intraday by the participant. If the block of the risk group has not been manually removed during that trading day, the blocking will be automatically removed at the beginning of the next trading day.</u></p> <p>3.3 Electronic Mail (e-mail) Warnings</p> <p>If the risk of a risk group reaches or exceeds the predetermined notification levels, an e-mail message is sent to all recipients named in the notification list determined for that risk group by the related member. There are three types of notification levels:</p> <ul style="list-style-type: none"> • Notices: The lowest level of warning. • Warnings: The highest level of warning. • Breaches: Risk limits are reached or exceeded. <p>...</p> <p>3.5 Blocking of Risk Group</p> <p>...</p> <p>A risk group may also be manually blocked by the Exchange or a member. A risk group blocked manually may only be unblocked again manually.</p>
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<p>Pending orders of all users included in a risk group may also be cancelled manually at once.</p> <p>...</p> <p>3.6 Default Group</p> <p>If a risk group is defined as default group, the risk of transactions that do not involve a valid user ID in their user field is also tracked under this risk group. Otherwise, these transactions are not reflected into total risk. Default group feature may be assigned only to one risk group identified under the same member.</p> <p>3.7 Mass Order Cancellation</p> <p>When a risk group enters into breach status, whether its open orders will be automatically cancelled or not may be identified by members. If the mass cancel option is marked for a risk group, in the case of breach of risk limits determined for an instrument type or class, only open orders of instruments belonging to the related instrument type or class of the risk group are cancelled, but in the case of breach of order rate limit, all open orders of the risk group are cancelled.</p> <p>3.8 Risk Group Parameter Definitions</p> <p>Some of the definitions required for risk group controls become valid and effective the day after the definition is made, while some other definitions become valid and effective immediately intraday.</p> <p>Definitions which may at any time be made in PTRM application interface and become valid and effective immediately are as listed below:</p> <ul style="list-style-type: none"> • Updating of limits (position limits, order rate limit, maximum order size) • Updating of warning & notification percentages 	<p>Pending orders of all users included in a risk group may also be cancelled manually at once. <u>Pending orders may be cancelled manually at once at the member and user level as well.</u></p> <p>...</p> <p>3.6 Mass Order Cancellation</p> <p>When a risk group enters into breach status, whether its open orders will be automatically cancelled or not may be identified by members <u>or by the Exchange</u>. If the mass cancel option is marked for a risk group, in the case of breach of risk limits determined for an instrument type or class, only open orders of instruments belonging to the related instrument type or class of the risk group are cancelled, but in the case of breach of order rate limit, all open orders of the risk group are cancelled.</p>
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<ul style="list-style-type: none">• Additions to e-mail recipients• Blocking all users included in a risk group from sending orders, or removal of such blocking• Removal of blocking arising out of breach of order rate limit• Restriction of instruments tradable by users included in a risk group• Cancellation at one time of all open orders of all users included in a risk group• If and when a risk group enters into breach status, activation of mass order cancellation which automatically cancels all open orders of all users included in that risk group <p>Definitions which may at any time be made in PTRM application interface, but become valid and effective only next day when the system is opened are as listed below:</p> <ul style="list-style-type: none">• Addition of a new limit or deletion of an existing limit• Activation of e-mail warnings• Deletion of e-mail recipients• Addition of new users to risk groups• Creation of a new risk group or deletion of an existing risk group• Exclusion of user(s) from a risk group• Change of the monitored user• Addition of default group to risk group	
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3.9 Risk Group Lock

The Exchange may lock the member risk groups so that they cannot make any changes. ~~A locked risk group is not authorized to take the following actions:~~

- ~~• Member cannot add new users to or exclude existing users from existing risk group/ groups.~~
 - ~~• Member cannot change the warning levels of e-mail alarms.~~
- ~~A locked risk group is authorized to take the following actions:~~
- ~~• Addition and exclusion of e-mail alarm recipients~~
 - ~~• Addition of instrument limit~~
 - ~~• Change of limits~~

3.10 Special Provisions on Risk Group Controls:

~~This section describes how some special situations are taken into account in risk group controls according to order or transaction types.~~

Trade Report

~~Transactions executed in reliance upon trade reports are taken into account under traded bought and traded sold counters in risk group controls. Trade reports are not rejected in maximum order size controls, or in tradable instrument restrictions, or in case of blocking of a risk group. Limit usage does not happen when the users send trade reports to the system, but when trade reports are accepted by the counterparty and converted into a transaction.~~

Market Maker Quotes

~~They are taken into account in open buy orders and open sell orders calculations just like normal orders in risk group controls. When they are converted into a transaction, they are included in traded bought and traded sold counters like normal orders.~~

3.7 Risk Group Lock

The Exchange may lock the member risk groups so that they cannot make any changes. **Members cannot add new users to or exclude existing users from a locked risk group/groups.**

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<p><i>Indicative Quotes</i></p> <p>They are not included in risk calculations of risk group controls.</p> <p><i>Locally Inactive Orders</i></p> <p>If orders are made inactive by user, use of limit is updated as if said orders are cancelled.</p> <p><i>Orders Automatically Suspended by the System (Centrally Inactive Orders)</i></p> <p>Orders made inactive by the system are treated and considered as open orders in risk group calculations.</p> <p><i>Market Orders</i></p> <p>Orders which do not remain in order book such as Fill or Kill and Fill and Kill orders are included in risk calculation if they are converted into a transaction. They are rejected if the risk group is blocked.</p> <p><i>Tailor-Made Series</i></p> <p>For the series created by selection of the desired date at order entry stage, risk calculations are made at the instrument type and class level of the related series.</p> <p><i>Cross Trades, Non-cleared Trades</i></p> <p>Trades wherein both parties to trade are the same member, and other non-cleared trades are also included in calculation of traded bought and sold limit counters.</p> <p>...</p> <p>4.1 PTRM Margin Calculation Method</p>	<p>...</p> <p>4.1 PTRM Margin Calculation Method</p>
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<p>PTRM margin calculation method is a portfolio-based risk calculation method developed on the basis of risk calculation method employed by Takasbank in its risk calculations. This method developed at a level not leading to any latency in order submission is basically a risk calculation method taking into consideration the risks posed not only by open positions but also by orders on real-time basis. Orders may not occasionally be included in calculation of margin consumed within the frame of the rules determined by the Exchange. Orders will not be included in margin calculation at the first stage of commissioning of BISTECH system.</p> <p>...</p> <p>After transition to BISTECH, the account structure in Debt Securities Market is formed by taking into consideration the account types (portfolio, fund, customer, etc.) and the capital market instruments for which central counterparty (CCP) services are given / are not given.</p> <p>...</p> <p>4.2 Special Cases on Margin Controls</p> <p>This section describes how some special cases emerging depending upon order or transaction types are taken into account in margin controls.</p> <p><i>Trade Reports</i></p> <p>Trade report orders (whether they are accepted by the counterparty and turned into a transaction or not) are taken into account in margin calculation with effect from the moment they are sent.</p> <p><i>Market Maker Quotes</i></p> <p>They are taken into account like normal orders in margin controls. When they turn into a position, they are included in calculation of long and short positions again like normal orders.</p>	<p>PTRM margin calculation method is a portfolio-based risk calculation method developed on the basis of risk calculation method employed by Takasbank in its risk calculations. This method developed at a level not leading to any latency in order submission is basically a risk calculation method taking into consideration the risks posed not only by open positions but also by orders on real-time basis. Orders may not occasionally be included in calculation of margin consumed within the frame of the rules determined by the Exchange.</p> <p>...</p> <p>The account structure in Debt Securities Market is formed by taking into consideration the account types (portfolio, fund, customer, etc.) and the capital market instruments for which central counterparty (CCP) services are given / are not given.</p> <p>...</p>
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<p><i>Indicative Quotes</i></p> <p>They are not included in margin calculation.</p> <p><i>Locally Inactive Orders</i></p> <p>If orders are made inactive by user, margin calculations are updated by considering that subject orders are cancelled.</p> <p><i>Orders Automatically Suspended by System (Centrally Inactive Orders)</i></p> <p>Orders automatically made inactive by system are considered and treated as open orders in margin calculations.</p> <p><i>Market Orders</i></p> <p>Orders which do not remain in order book such as Fill or Kill and Fill and Kill orders are included in margin calculation if they turn into a transaction.</p> <p><i>Tailor-Made Series</i></p> <p>For the series created by selection of the desired date at order entry stage, margin controls are made by using the unit margins of the instrument class of the series created.</p> <p><i>Cross Trades, Non-cleared Trades</i></p> <p>Cross trades wherein both parties to trade are the same member, and other non-cleared trade report orders are not included in calculation of margin controls. However, fund transactions with same value date executed after 14:00 hours between different parties are included in margin calculation.</p> <p>...</p>	
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