

İSTANBUL SETTLEMENT AND CUSTODY BANK INC.
BORSA İSTANBUL INC. MONEY MARKET PROCEDURE ON CLEARING AND
SETTLEMENT AND CENTRAL COUNTERPARTY SERVICE PRINCIPLES

CHAPTER ONE

The Objective

General Provision

ARTICLE 1- (1) The objective of this procedure is to regulate procedure and principles regarding membership, risk management and collateral, default, discipline, revenue and other issues in relation to central counterparty service that İstanbul Takas ve Saklama Bankası A.Ş shall provide at Borsa İstanbul Money market as central clearing agency.

The Scope

ARTICLE 2- (1) This Procedure encompasses issues regarding membership, risk management and collateral, clearing, default, discipline, revenue and other issues in relation to central counterparty services that İstanbul Takas ve Saklama Bankası A.Ş. shall provide at Borsa İstanbul Money Market as central clearing agency .

The Ground

ARTICLE 3- (1) This Procedure has been prepared in reliance upon article 77 and 78 of 6362 no Capital Markets Law released on 30/12/2012 dated and 28513 no Official Gazette, İstanbul Takas ve Saklama Bankası A.Ş. Central Clearing Regulation released on 18/07/2013 dated and 28711 no Official Gazette, İstanbul Takas ve Saklama Bankası A.Ş. Central Counterparty Regulation released on 14/08/2013 dated and 28735 no Official Gazette and Directive on Principles of İstanbul Takas ve Saklama Bankası A.Ş. Borsa İstanbul Money Market Clearing and Central Counterparty Service.

Definition and abbreviations

ARTICLE 4- (1) In this Procedure the following mean;

- a) **Open Bid Method** : Takasbank assuming buyer position vs. seller and seller vs. buyer the instant that a transaction is matched by joining Market participants,
- b) **Borsa/BİAŞ**: Borsa İstanbul Incorporation,
- c) **Omnibus Account** : Accounts opened with Takasbank on behalf of CCP members, where members' proprietary or client positions are collectively held, but in any event CCP member's proprietary positions and client positions are segregated,
- ç) **Appraised Collateral** : The amount calculated by applying collateral valuation multiples, group limits and sub-group limits to the total deposited collateral,
- d) **General Manager**: İstanbul Takas ve Saklama Bankası A. Ş. General Manager,
- e) **General Regulation**: General Regulation on Establishment and Working Principles of Central Clearing Agencies released on 30/5/2013 dated and 28662 no Official Gazette,

- f) **Intraday Risk Calculation** : Risk and collateral valuations using Last intraday collateral and position balances and prices ,
- g) **Law**: 6362 no Capital Markets Law released on 30/12/2012 dated and 28513 no Official Gazette,
- ğ) **Board**: Capital Markets Board,
- h) **CCP**: Central counterparty,
- ı) **Central Counterparty Regulation** : İstanbul Takas ve Saklama Bankası A.Ş. Central Counterparty Regulation released on 14/08/2013 dated and 28735 no Official Gazette ,
- i) **Central Clearing Regulation**: İstanbul Takas ve Saklama Bankası A.Ş. Central Clearing Regulation released on 18/07/2013 dated and 28711 no Official Gazette,
- j) **Market**: Borsa İstanbul Money Market,
- k) **Portfolio Based Margining**: Calculation of collateral amounts to be received from CCP members by Takasbank by taking into account risk mitigating effect of correlations among assets in the same account,
- l) **Position**: Settlement debit and credits arising from transactions executed at the Market,
- m) **Procedure**: Application principles including procedures for operation and practices subject to rules and principles laid down in the Directive and approved by the General Manager,
- n) **System**: Takasbank system established to clear transactions executed at Borsa Istanbul Money Market,
- o) **Clearing**: The entire processes, which facilitates cash transfer between parties subject to the collaterals deposited, through performance of obligations arising from transactions executed at the Market by members, in time and conditions stipulated by Takasbank,
- ö) **Takasbank**: Istanbul Settlement and Custody Bank Incorporation,
- p) **Individual position account**: Accounts where a single client of the members or members' proprietary positions are held, as sub-account of accounts opened with Takasbank on behalf of CCP members,
- r) **Margin accounts**: Accounts opened with Takasbank on behalf of CCP members, where collaterals required for members' proprietary or client positions are held,
- s) **CBRT**: The Central Bank of the Republic of Turkey,
- ş) **Member**: CCP members, who are allowed to be a party to clearing services provided by Takasbank as central counterparty at the Market, subject to 6th article of Central Counterparty Regulation,
- t) **Directive**: Directive on Principles of İstanbul Takas ve Saklama Bankası A.Ş. Borsa İstanbul Money Market Clearing and Central Counterparty Services,
- u) **Board of Directors**: Takasbank Board of Directors.

CHAPTER TWO

Membership Principles

Membership

ARTICLE 5- (1) Banks and brokerage firms carrying the requirements as per article 6 of the procedure may be member of CCP application that shall be provided by Takasbank for transactions executed at the

Market on the condition that they are authorized by their Board of Directors.

(2) Members trading at the market are considered as Direct CCP Member.

CCP Membership requirements

ARTICLE 6- (1) Responsibility of identifying that membership requirements have been met and assessment thereof lies with Takasbank and at least the following requirements should have been met for the membership:

- a) Membership requirements as per Central Clearing Regulation should have been met,
- b) License for Trading at the Market should not have been revoked due to violation of the regulation,
- c) Agreement and undertakings regarding CCP services, whose contents have been determined by Takasbank should have been signed and submitted to Takasbank,
- ç) Its financial structure should be strong enough to perform obligations to Takasbank,
- d) Other information and documents that may be demanded by Takasbank should have been submitted,
- e) Statements on IT, risk management, internal control and internal audit systems in line with the sample determined by Takasbank must have been approved and submitted by the Board of Directors of members,
- f) For banks and brokerage firms to qualify as Direct CCP member;
 - i. They must have restricted or general custody service license pursuant to the respective regulation,
 - ii. Brokerage firms must have at least 10,000,000 TRY capital , banks 50,000,000 TRY,
 - iii. To have received at least D grade following internal rating completed by Takasbank.

(2) During the internal rating task conducted by Takasbank in determining the grade of the firm financial tables, annual report, introductory form on the firm , firm key information form, market trade volumes, TRY safekeeping balances , default and intelligence information and if there are, grades received from rating agencies, market intelligence information and printed and visual media news are used. Takasbank announces the parameters it takes into account in the internal rating methodology it employs and the impact of these parameters on rating grades through its website.

(3) Takasbank is authorized to establish minimum criteria it shall seek for technical infrastructure, IT, risk management, internal control and internal audit systems , to give time to institutions that don't meet the sought criteria, to obtain commitment, and check whether the criteria have been met or not.

(4) The Board of Directors is authorized to increase minimum capitals in light of capital market and banking regulations and market conditions or reduce to former level.

Membership application and admission

ARTICLE 7- (1) Institutions that shall apply for membership, must apply with a letter addressed to Takasbank General Management including application request and information and documents certifying that the membership requirements sought in this Procedure have been met and send information and documents as per article 1 of Central Clearing Regulation to Takasbank attached to such letter.

- a) Membership application form,
 - b) Notarized copy of license certificate,
 - c) Document to be obtained from Borsa that investment institutions applying for Direct CCP membership operate at the Market,
 - ç) Membership Agreement and Pre-Agreement Information Form,
 - d) Cash, Asset, Collateral, DVP and EFT Instruction Undertaking,
 - e) Application Agreement for Client Instructions that shall be sent to İstanbul Takas ve Saklama Bankası A.Ş. via fax,
 - f) Other documents that shall be requested by Takasbank subject to respective regulation.
- (2) For membership applications to be taken into evaluation by Takasbank, the information and documents as per the first paragraph of this article and other information that shall be requested by Takasbank should have been completed. Takasbank evaluates the filed applications in terms of whether they have met the requirements sought in article 6. Decision taken by Takasbank regarding the application is notified to the concerned party in 2 months in writing.
- (3) For the institution whose membership application has been accepted to start operations with Takasbank, in 1 month following the notice that membership application is considered suitable it must;
- a) Deposit membership collateral,
 - b) Deposit Guarantee Fund contribution share,
 - c) Authorize personnel that shall trade on behalf of the Member over Takasbank system.
- Otherwise the license permit given to the respective institution is revoked. The date that such obligations are served, is considered as the date that the institution has become a member of the central counterparty service provided at the Market and the member gains the right to trade as of such date.
- (4) Institutions, who become a member of BİAŞ Debt Instruments Market, must only perform the obligation as per paragraph 1, (d) section of this article with the statement in article 6, paragraph 1, (e) section.
- (5) Institutions who have deposited BİAŞ Debt Instruments Market membership collateral are exempt from membership collateral.

General obligations of members

ARTICLE 8- (1) Members are obliged to comply with the following issues:

- a) To act in accordance with all principle and rules determined with this Procedure and other respective regulations in relation to central counterparty service,
- b) To act in accordance with principles of good intention and integrity to clients and other members,
- c) To deposit guarantee fund contribution shares stipulated by Takasbank,
- ç) To take all necessary measure to ensure continuity of necessary internal control, risk management and internal audit mechanism to be a CCP member,
- d) If a segregated individual account is opened; in cases where member accounts with Takasbank and associated sub-accounts must be migrated and a transferee CCP member has been determined in advance, to provide information on such matter in the framework agreements signed with clients,
- e) If segregated individual account is opened to ensure that clients are fully and accurately

informed on matters involving the structure of accounts, where collaterals are held, and the degree of segregation provided by Takasbank, and that the Member has disposal powers over collateral accounts opened with Takasbank, and these powers are restricted by Takasbank to only the required amount of collateral,

f) To inform the client that other client positions are held under member's position accounts, the collateral associated with these accounts shall be used for total risk arising from omnibus account and it is accepted by Takasbank that collaterals associated with these accounts belong to the member,

g) Members should meet collaterals to be deposited for their proprietary trades from their own assets,

ğ) To meet collaterals to be deposited for client positions with own collaterals or those that it has gained right of disposal through transfer of possession agreements according to the Law,

h) If collaterals deposited for client positions have been obtained from clients or other persons and institutions through transfer of possession agreements, keeping transfer of possession agreements, establishing a sound record and monitoring system which shall ensure matching of individual and institutions that the collaterals have been received from with collateral deposited into associated position accounts,

ı) To act in accordance with the entire principle and rules in the Law and other related legislations in relation to monitoring client asset and collaterals and safekeeping them,

i) To promptly meet fees, charges, commissions and other obligations demanded by Takasbank,

j) To establish constant reconciliation between records related to position and collateral accounts with Takasbank and their portfolio and client accounts,

k) To deposit collateral into respective collateral accounts with Takasbank,

l) To provide all kinds of information and documents that shall be requested by Takasbank and the Board on matters deemed necessary in relation to the tasks and transactions under this Directive and to provide all kinds of support during examinations that shall be conducted by those designated by Takasbank and the Board,

m) In addition to books and records that they are legally obliged to keep, to keep other records decided by Takasbank, to arrange information and documents according to the procedure; to deliver these periodically or upon Takasbank's request to Takasbank and to keep such records and documents for 2 years,

n) To duly perform other obligations under this Directive.

(2) If any Member envisages that it shall not be able to perform obligations partially or fully, it is mandatory to notify the Board and other relevant public organization and institutions immediately with all substantiating information and documents also including the reasons for the situation. Such notification does not refrain Takasbank taking measures laid down in this Directive.

Restriction of member's activities

ARTICLE 9- (1) Members' activities under this Directive may be restricted by Takasbank in the following circumstances:

a) Termination of its activities pursuant to Central Clearing Regulation article 13 and Central Counterparty Regulation article 14 in the markets or capital market instrument where clearing

service is provided, or dismissal from membership,

b) Failure to perform obligations laid down in Directive, Procedure and membership agreement,

c) In relation to the member; discovery of adversities such as protest, confiscation, interim injunction, temporary or permanent suspension of activities, cancellation of respective operation license certificate, being banned from execution of transactions on capital market instruments traded at any market under BİAŞ, issuance of gradual liquidation or bankruptcy decision or receiving negative intelligence.

ç) Identifying decrease in Member's creditworthiness or lack of creditworthiness following intelligence, financial analysis and/or rating studies conducted periodically by Takasbank.

(2) Member cannot trade for accounts belonging to persons who have been banned from trading by the Board or are subject to similar restrictions.

(3) If any of the situations written in this article prevails, Takasbank may decide to partially or fully liquidate the Member's existing positions.

(4) If the member's activities are restricted due to issues provided in this article, the situation is notified to Borsa, the Board and the relevant public authority.

Termination of membership

ARTICLE 10- (1) CCP membership may be terminated with Board decision if,

a) It is determined by Takasbank that qualification for either of the CCP membership requirements stipulated with this Procedure and other relevant regulations, has been lost,

b) It is discovered by Takasbank that significant risks to the extent of endangering safe and continuous operation of CCP system have arisen due to failure to serve the obligations set in this Directive or other relevant regulations,

c) CCP members whose activities have been restricted subject to provisions of CCP Regulation, article 14, second paragraph fail to perform their respective obligations within maximum 6 months period granted to them pursuant to sixth paragraph of the same article,

ç) CCP member requests so.

(2) Those intending to terminate their CCP membership in accordance with the item (ç) of the first paragraph of this article shall notify Takasbank of the situation in writing. However, the relevant member intending to terminate its CCP membership must have fulfilled all of its obligations under the Procedure and other relevant regulations. In such cases, the Board of Directors may consent the termination of the CCP membership. If the request for termination of the membership is submitted without fulfilling all obligations under the Procedure and other regulations, the member shall be given a period of 30 days for fulfilling such obligations. The member that fulfills such obligations within the period of time granted shall notify Takasbank of such case in writing, and the request for termination by the member shall be addressed at the next meeting of the Board of Directors following such notification. Members who fail to fulfill such obligations within a period of 30 days may only apply for terminating their membership once they have closed all their positions.

(3) Takasbank refers to Borsa for opinion while terminating membership of a CCP member.

(4) Even in the event of termination of CCP membership, the said institution's trade obligations to Takasbank under this Directive and other related regulations continue until Board of Directors' ruling regarding termination of membership.

(5) It is mandatory to immediately inform the Board and other related public organizations and institutions and Borsa about the member whose CCP membership has been terminated.

CHAPTER THREE

Settlement and CCP service principles

Takasbank's obligation

ARTICLE 11- (1) Takasbank is the central counterparty through open bid method in transactions executed at the Market and cleared in the System. In such transactions Takasbank guarantees completion of settlements by acting as buyer against seller and seller against buyer. Takasbank assumes settlement obligations arising for transactions executed by Members in accordance with the procedures and principles set in this Directive and the regulation without any prejudice to restrictions to set in article 36 of Central Counterparty Regulation and market liquidity conditions.

(2) In open bid method Takasbank's obligation to the parties of the transaction starts at the instant the buy and sell orders are matched at the Market and ends upon the completion of settlement at the end of maturity. Takasbank's obligation to the parties regarding transactions cancelled by Borsa is removed upon cancellation of updates by Takasbank. Subject to paragraph 4, article 5 of Central Counterparty Regulation, if limit per trade allocated to the Member is exceeded, without prejudice to provisions of article 26 of this Procedure, the Member is not held liable for losses that may arise from transactions it avoided.

(3) In transaction executed at the Market, Takasbank faces Members. Takasbank is not responsible for members' obligations to clients.

(4) Provisions of Central Counterparty Regulation, Section 5, are applied during meeting liquidity needs and loss, which may arise in the event of default, bound with liquidity conditions and constraints.

General Principles

ARTICLE 12- (1) Members trade by reaching Takasbank system through web infrastructure.

(2) Settlement of all Market trades is carried out by Takasbank excluding exceptions brought by the board.

(3) Rights and obligations of members arising from trades subject to settlement are resolved accountwise over accounts assigned by Takasbank.

(4) In paying cash liabilities arising from settlement transactions, the currency of trades is used.

(5) Trades are included into settlement at the initial value date and the end of maturity.

Settlement date and time

ARTICLE 13- (1) Settlement date of Market trades is the trade date (T+0). Future valued contracts are settled at value date. However, in trades executed at the market due to default, value constraint is not sought.

(2) In determining settlement period, business days on which Takasbank and the Market open, are taken into account.

(3) The obligations are fulfilled at the following hours. Otherwise default provisions are applied.

Transaction	Time
Settlement start time	15:30
Settlement cutoff	16:45
Margin call deadline	15:00

(4) Settlement processes applicable for half-days are determined by Takasbank and announced to the members.

(5) It is not possible to finalize settlement transactions by fulfillment of cash obligations by the parties before settlement date.

(6) Settlement periods may be changed by the General Manager temporarily due to problems arising from settlement, safekeeping, payment and market operation systems

The working day and hours of the system

ARTICLE 14- (1) The system is opened in the morning at 08:00 on official business days, and closed at 21:00. On half-days the closing time is 16:00. The transactions are executed during the hours set in this procedure and bound with these hours.

(2) If required, operation day and hours are changed by the Bank and announced to members.

(3) System time is the key for all transactions executed over the system.

Finality of settlement

ARTICLE 15- (1) Settlement instruction and transactions and payment transactions arising from trades executed at the Market are irreversible and cannot be cancelled including temporary or permanent suspension of the member's activities, launch of liquidation process by administrative and judiciary authorities.

(2) Borsa is informed for immediate halt of transactions the instant that suspension of member's activities or a decision which may lead to such consequence is notified to Takasbank.

(3) Settlement transactions for all contracts, which are executed at the market and transferred to settlement system, are finalized subject to provisions of this Directive.

(4) Collaterals established by the member with existing cash and securities balance at Takasbank are used to fulfill obligations. The member should fulfill all liabilities against Takasbank to be able to execute transactions subject to the decision submitted to Takasbank.

Netting

ARTICLE 16- (1) Same day valued and future valued transactions shall be performed at the market.

(2) Trades are netted based on members, under risk groups, on value and maturity dates.

(3) Net debit and credit amounts for Market trades as of the member's respective settlement date are calculated based on ;

a) "Member Risk Group" for trades executed on behalf of its portfolio,

b) "Client Risk Group" for trades executed on behalf of clients.

Delivery versus payment principle

ARTICLE 17- (1) In settlement transactions, payment vs. delivery of collaterals principle is applied. To be able to pay settlement receivables, collateral obligations should have been fulfilled and there should be sufficient balance in the settlement pool. Cash credits of members, who have not fulfilled their collateral obligations, are not paid.

(2) Receivables are paid partially for obligations fulfilled partially.

Market clearing processes

ARTICLE 18- (1) Net cash liabilities belonging to both risk groups in relation to trades executed at the market, are paid to TLBBK debit coverage account opened on member basis with Takasbank until 16:45 (including 16:45)

(2) Settlement obligations are followed in the System based on 2 separate risk groups :

- a) “Member Risk Group” for trades that belong to the members’ proprietary portfolio ,
- b) “Client Risk Group” for trades executed for client accounts

(3) If the member is indebted to both risk groups, partially paid amounts are at first used to cover “Client Risk Group”.

(4) If the member, who is being distributed receivables, owes to another risk group, the distributed receivables is deducted from the debt belonging to the risk group that it owes to.

(5) To be able to distribute receivables the member should have fulfilled its collateral obligation. The credits of Members, who are known to have served their collateral obligations, are transferred automatically by the system at certain intervals.

(6) If the distributable balance is insufficient receivable distribution is made on pro-rata basis.

(7) Banks’ cash receivables are transferred to TIC accounts with CBRT.

(8) Trades executed due to default are not netted.

Offset between markets

ARTICLE 19- (1) It is possible that receivables from one market is offset against obligations arising from another market’s trades by giving cash offset instruction between markets operated by Takasbank and markets where clearing service is provided and Borsa Istanbul Money Market.

(2) It is possible to offset Borsa Istanbul Money Market securities margin requirement/receivables against securities margin requirement/receivables arising from other markets at Debt Instruments market.

(3) All offset instructions are valid until the EFT cut-off time on the instruction date, and default is not applied to offsets that are executed on the same date until EFT cut-off time. However instructions that are not executed until EFT cut-off time lose their validity.

(4) If the receivables cannot be collected on the same day despite offset instruction from the market holding the due, the debtor is obliged to pay the obligation to the market that it owes to on the same day.

(5) It is mandatory that cash offset instructions are transmitted to Takasbank electronically ;

- a) Between Borsa Istanbul Money Market and Equity Market/ Debt Instruments Market/ Equity Repo market latest until 15:30,
- b) Between Borsa Istanbul Money Market and Takasbank Money Market latest until 15:45.

(6) If the offset instruction cannot be transmitted electronically, it is transmitted in writing on the condition of adhering to the same hours.

CHAPTER FOUR

Account Transactions

Account structure

ARTICLE 20- (1) All members that wish to trade at the Market, are obliged to open cash, margin and guarantee fund accounts required to execute trades with Takasbank.

(2) Accounts are opened automatically for members who have an account with Takasbank.

(3) Trade margins are followed under two separate accounts, “Member” for the Portfolio and “Client” for the clients.

(4) Margin and settlement requirements are met account wise.

(5) Cash requirements are deposited into the TLBBK account opened with Takasbank for the member until 16:45.

(6) The position accounts hold amounts calculated after netting-off the trades. Risk management is conducted through positions accounts.

(7) Margin withdrawal deposit from the account is executed via market screens. Transactions cannot be executed directly for the following accounts listed, they are used for reporting.

Collateral type	Name of account	Account
Cash (Turkish Lira)	Cash margin	TLBNT
Cash (Turkish Lira)	Cash guarantee fund margin	TGFNT
USD	Margin	TLBFX-10101-1
USD	Guarantee fund margin	TGFFX-10101-1
EUR	Margin	TLBFX-10120-1
EUR	Guarantee fund margin	TGFFX-10120-1
GBP	Margin	TLBFX-10103-1
GBP	Guarantee fund margin	TGFFX-10103-1
GDS*/Lease certificate	Margin account (Portfolio)	801
GDS/Lease certificate	Margin account(Client)	803
GDS/Lease certificate	Guarantee fund margin account	804
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Cash margin (Portfolio)	801K
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Cash margin (Client)	803K
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Cash guarantee fund margin	804K

Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Cash margin	5074
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Cash guarantee fund margin	5073
Shares in BIST100 Index	Margin	TRL
Shares in BIST100 Index	Guarantee fund margin	TGF
Equity umbrella fund shares	Margin	TRL
Equity umbrella fund shares	Guarantee fund margin	TGF
Debt instruments umbrella fund shares	Margin	TRL
Debt instruments umbrella fund shares	Guarantee fund margin	TGF
Standard gold traded on the exchanges	Margin	TRLAU
Standard gold traded on the exchanges	Guarantee fund margin	TRGAU
Borsa İstanbul A.Ş. Shares	Margin	TRL
Borsa İstanbul A.Ş. Shares	Guarantee fund margin	TGF

Segregation

ARTICLE 21- (1) Client trade, position and margins are followed under omnibus accounts or individual trade and positions accounts opened in association to the client and margin accounts associated with such accounts, and separate from Member's proprietary trade, position and margins.

(2) Member's proprietary position and margins are held under a position account that shall be opened exclusively and margin account associated with this account.

Account migration

ARTICLE 22- (1) Positions followed in position accounts and margins associated with such positions, may be migrated by Takasbank among CCP members, upon transferor and transferee CCP members' instruction, if deemed appropriate by Takasbank. In this case, transferor CCP member obtains written approval of clients whose position and margins are to be transferred.

(2) To be able to migrate accounts where multiple client positions are held, instruction of all clients holding a position in the accounts, is required. Position accounts, which have been instructed to be migrated, and associated margins, are migrated upon the member's instruction.

(3) Takasbank reserves the right to refuse account migration requests for the health and soundness of settlement transactions.

(4) If positions held in accounts associated with a Member whose activities has been restricted due to default or other reasons, or who has been dismissed, are migrated to another Member, the migration transactions are executed by Takasbank ;

a) If the transferee Member has been previously assigned in the agreement signed between the Transferor Member and Takasbank, subject to the provisions of such agreement ,

b) Notwithstanding that there is no prior assignment with respect to the transferee Member in the agreement signed between the Transferor Member and Takasbank, if an agreement has been made until the date of migration between the transferor Member and the transferee Member,

subject to the provisions of such agreement,

c) If an assignment has not been made in accordance with the provisions of (a) and (b) sections of this paragraph, if a transferee Member may be found by Takasbank.

(5) During a migration process, margins in the transferred accounts, cannot be withdrawn until reconciliation is reached between records of the Member whose activities have been restricted or who has been dismissed, and Takasbank. The provisions in relation to enforcement proceedings executed by judiciary and administrative authorities are reserved.

(6) Accounts, which cannot be migrated due to not having found a Member to takeover position and margins, lack of enough time to find such a Member or margin call, or accounts where margin call arises after liquidation of positions, may be subjected to liquidation as per principles in the Fifth Section of Central Counterparty Regulation. The margin balance that shall arise after liquidation of positions in accounts that cannot be migrated due to not having found a transferee Member, is returned as per article 27 of Central Counterparty Regulation.

CHAPTER FIVE

Risk Management and Margining Principles

Risk management

ARTICLE 23- (1) Risk management is conducted by Takasbank at the Market.

(2) Trades executed on behalf of the members are followed under “Member” account and those on behalf of clients, under “Client” account. Risk management for margins is conducted over the before mentioned 2 accounts.

(3) Margin requirement for each account is calculated separately and each position account’s margin adequacy is separately checked.

(4) At the market pre-trade, instant of the trade and post-trade risk management processes are applied.

Pre-trade risk management

ARTICLE 24- (1) Orders cannot be routed via accounts without trade limit at the market.

(2) Trade limit is calculated by dividing free margin amount in the position account and associated margin account by pre-trade risk parameter.

(3) Pre-trade risk parameter is determined by Takasbank using at least 1-year data set and 99.5% confidence level and reviewed monthly also in light of market conditions. If deemed necessary, Takasbank may revise pre-trade risk parameter without waiting for the end of one-month period in line with the market conditions. The determined parameter is announced with a general letter.

(4) In trade limit check executed under pre-trade risk management calculations, for opposite positions only the large total borrowing or lending order size in absolute value is taken into consideration.

(5) The potential of outstanding orders for accounts short of margin to generate risk, is assessed in light of market conditions and financial capability of the member. Orders that may potentially generate risk are determined by Takasbank. Orders considered risky may be cancelled by Borsa upon Takasbank’s request.

Initial Margin, Instant of the Trade and Post-trade Risk Management

ARTICLE 25- (1) Borsa Istanbul Money Market instant of the trade and post trade risk management system is evaluated separately from the aspect of borrowing and lending member.

(2) The lending member's margin requirement is limited with initial margin until delivery of the amount, which is subject matter of lending transaction, to the cash pool.

(3) In borrowing transactions in addition to initial margin capital and interest amount are also collateralized.

(4) Initial margin is collected to compensate for the other member's loss during the period until resolution of default arising from the member not performing its debt on the value date or maturity of the transaction. Initial margin is calculated the instant that the order is matched and becomes a trade, and reflected on the margin account.

(5) Initial margin is calculated by Takasbank by using at least 1-year data set and 99.5% confidence level, and is reviewed every month in light of market conditions. If deemed necessary, Takasbank may revise initial margin without waiting for the end of the one-month period in light of market conditions. The parameter based on the initial margin can be differentiated on the basis of maturity groups. The set parameter is announced via general letter.

(6) Funds supplied to the market could be considered as collateral, at a ratio to be set by Takasbank, for transactions that that the same group again shall execute at the Market.

(7) Collateral conversion parameter showing the ratio for use funds supplied to the Market as collateral, is set by Takasbank in light of market conditions and reviewed every month, If considered necessary, Takasbank may revise collateral conversion parameter in line with market conditions without waiting for the end of three month period. The set parameter is announced with a general letter.

(8) Prior to repayment of the fund supplied to the Market before trade maturity, margin adequacy of the account to which cash shall be transferred and the associated position account is checked. If margin is short, cash receivable as much as margin deficit amount is locked-up as collateral. It is not transferred to the member's current account.

(9) Before transfer of borrowed amount to borrowing account, margin adequacy is checked by Takasbank. Settlement dues are distributed to accounts short of margin to the extent of their margin adequacies by discounting with "the rate employed in calculating short margin receivable lock-up"(distribution of dues parameter). Distribution of dues parameter is determined in light of market conditions, reviewed monthly. If deemed necessary, Takasbank may revise in line with market conditions without waiting for the end of one month period. The set parameter is announced with general letter.

(10) Margin adequacy for accounts is calculated at the end of the day and reflected onto member screens. Margin top-up deadline is following business day 15:00 (including 15:00) . After this time, default provisions are applied for accounts short of margin.

(11) In addition to routine end-of-day margin adequacy checks Takasbank may also issue intraday margin call to accounts short of margin. Members, who are issued intraday margin call, should have the adequate balance in 2 hours. Default provisions are applied for members that don't serve margin requirement until set deadline.

(12) Margin calls are issued via member screens provided by Takasbank or email. If margin call is issued via the system, the member is considered to have received the call without need for further warning and notice. The member's responsibility starts the instant margin call issued by Takasbank reaches it.

(13) Instant settlement positions in accounts that members open with Takasbank, guarantee fund contribution shares and margins are subjected to mark-to-market process by Takasbank.

(14) In calculating margin requirement positions related to different risk groups are not netted- off.

Risk limits

ARTICLE 26- (1) Takasbank defines risk limit at the Market it provides CCP service to the degree of Members' financial capabilities. Risk limits may be assigned separately for the Market as well as a sum for all CCP-serviced markets. Risk limits are determined over margin requirement amounts for the positions carried by member at CCP-serviced markets.

(2) Limit per member is only notified to the respective Member by Takasbank.

(3) It is checked during the day whether the member's total margin requirement arising from all proprietary and client positions taken in CCP serviced- markets exceeds the risk limit.

(4) It is essential that member exceeding risk limit does not route any order. The responsibility lies with the member.

CHAPTER SIX

Margin Principles

Assets eligible as margin and guarantee fund contribution share

ARTICLE 27- (1) The following assets may be used by members to serve margin and guarantee fund contribution share requirements. Takasbank Board of Directors is authorized to accept other assets as margin or guarantee fund contribution share as per article 19 of Central Counterparty Regulation and to set group/ sub-group limits in relation to these.

- a) Cash (Turkish Lira)
- b) Convertible Currency (USD/EUR/GBP)
- c) Government Debt Securities,
- ç) Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey
- d) Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey,
- e) Shares in BIST100 index
- f) Equity umbrella fund shares
- g) Debt instruments umbrella fund shares
- ğ) Standard gold traded on the exchanges
- h) Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities
- ı) Borsa Istanbul A.Ş. Shares

(2) Theoretical pricing formulae that may be employed in valuation of assets accepted as margin and guarantee fund contribution share by Takasbank, and their methods, are released on Takasbank website.

If domestic government borrowing securities accepted as margin or guarantee fund contribution share are redeemed, the redemption amounts are transferred to the respective cash margin account.

(3) Should gold is pledged as collateral, it must be composed of 100 gram and its multiples gold

bullion bars that are traded as standard gold in the Exchange Precious Metals and Diamond Market.

(4) Out of mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities, those issued and denominated in TL by Türkiye Kalkınma ve Yatırım Bankası A.Ş. Varlık Finansman Funds and having at least “AA+” long term local currency rate are accepted as collateral.

Mark-to-market of assets eligible as margin and guarantee fund contribution share

ARTICLE 28- (1) Non-cash assets eligible as margin and guarantee fund contribution share, are subjected to valuation at the end of each trade date over the following prices, by Takasbank. It is essential that the valuation is conducted at the end of the day. However, if seen necessary by Takasbank, it is also possible to conduct intraday valuation.

Margin	Valuation Criteria	Explanation
FX	CBRT FX Bid Rate	Benchmark CBRT Rate is fixed at 15:30. In intraday valuations the last trade price at Interbank FX market is used.
Government Debt Security	CBRT Prices, Market Price, Theoretical price set by Takasbank	In intraday valuation process, daily benchmark values of Domestic Government Borrowing Securities set by CBRT are used. In intraday valuations prevailing price at Borsa Debt Instruments Market, if such price is not available theoretical price determined by Takasbank is used.
Lease Certificates Issued by T.C.Hazinesi Var.Kiralama A.Ş.	CBRT Prices, Market Price, Theoretical price set by Takasbank	In end of day valuation process, daily benchmark values of Domestic Government Borrowing Securities set by CBRT are used. In intraday valuations prevailing price at Borsa Debt Instruments Market, if such price is not available theoretical price determined by Takasbank is used.
Eurobond	Intra-day: Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank. End-of-day: Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank.	Prices calculated by the yield curve comprising of the traded Eurobonds and if the yield curve is failed to be formed, the price determined by Takasbank.

Shares in BIST 100 Index	<p>Intra-day: Last trade price realized in BİAŞ Equity Market before the calculation time.</p> <p>End-of-day: Session-end last trade price.</p>	Should no trade is realized in the Exchange, the theoretical price determined by Takasbank. For the traded securities, the last trade price. If the unmatched buy and sell orders (in case the buy and sell are received simultaneously) are received later than the last trade price, the average buy and sell prices can also be used.
Equity and debt instruments umbrella fund shares	Price announced by the issuer on the relevant day	The price announced by its issuer used for the following business day.
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	<p>Intra-day: Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank.</p> <p>End-of-day: Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank.</p>	They are valued by using the prices calculated by the yield curve comprising of zero-coupon and fixed-coupon bonds issued by Ministry of Treasury and Finance of Turkey, if the yield curve is failed to be formed, the price determined by Takasbank is used
Gold in Standard Traded in Exchanges	<p>Intra-day: The latest trade price realized in BİAŞ Precious Metals and Diamonds Market before the calculation time.</p> <p>End-of-day: BİAŞ Precious Metals and Diamonds Market end-of-day bulletin price.</p>	It is valued with the price calculated by using the CBRT foreign currency buying rate of the previous end-of-day price, over the USD/ONS price formed for T+0 dated transactions in Borsa Precious Metals and Diamonds Market. Should no trade is conducted, the theoretical price or the weighted average price formed in the previous session can be used.

Valuation haircuts

ARTICLE 29- (1) In calculation of valuation multiples reflecting reduction ratios and to be applied to margins and guarantee fund contribution shares, parametric, non-parametric or simulation-based statistical methods considered suitable by Takasbank are used. In determining collateral valuation multiples, the respective asset's credit risk appraised by Takasbank, maturity, volatility under extreme market conditions, liquidity and if there is FX risk may be taken into consideration.

(2) In the calculations 99.90% statistical confidence level and 2 business days holding period are used. The minimum historical data set to use in calculations is 1 year. For assets where there is not enough or no historical data available, valuation multiples are assigned by taking multiples calculated for assets with similar specifications as benchmark.

(3) Valuation Haircuts for assets eligible as collateral and guarantee fund contribution

Collateral Type	Valuation Haircut
Cash (Turkish Lira)	100%
Convertible Currency (USD)	94%
Convertible Currency (EUR)	95%
Convertible Currency (GBP)	93%
Government Debt Securities	0-1 Year 97% 1-5 Years 93% 5 Years and more 92%
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey (USD)	Up to 5 Years 93% 5-10 Years 93% 10-30 Years 89% 30 Years and more 86%
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey (EUR)	Up to 5 Years 93% 5-10 Years 91% 10-30 Years 88% 30 Years and more 85%
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	0-1 Year 95% 1-5 Years 91% 5 Years and more 90%
Shares in BIST100 Index	BIST 30 86% BIST 100 82%
Equity umbrella fund shares	89%
Debt instruments umbrella fund shares	89%
Standard gold traded on the exchanges	91%
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	0-1 Year 95% 1-5 Years 91% 5 Years and more 90%
Borsa Istanbul A.Ş. Shares	100%

Margin composition limits

ARTICLE 30- (1) The ratios in the following table are applied for other assets besides non-cash TRY that are eligible collateral, and composition limits in relation to these. Takasbank Board of Directors is authorized to assign limits for new assets eligible as collateral and composition limits for such assets and

to change composition limits including those determined with this Procedure.

Assets Eligible as Collateral	Group Limit	Sub-group Limit (As group limit percentage)
Cash (Turkish Lira)	En Fazla 100%	-
Convertible Currency (USD/EUR/GBP)	En Fazla 100%	-
Government Debt Securities	En Fazla 100%	35% (Based on ISIN)
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	En Fazla 100%	35% (Based on ISIN)
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	En Fazla 50%	40% (Based on ISIN)
Shares in BIST100 Index	En Fazla %90	20%
Equity umbrella fund shares	En Fazla 50%	20%
Debt instruments umbrella fund shares	En Fazla 50%	20%
Standard gold traded on the exchanges	En Fazla %25	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	En Fazla 50%	40%
Borsa Istanbul A.Ş. Shares	En Fazla 50%	-

(2) In calculating the collateral values of the assets eligible as collateral against the central counterpart and/or clearing and settlement service, the following valuation haircuts shall be taken as a basis.

Ownership of collaterals

ARTICLE 31- (1) Ownership of collaterals received subject to CCP service, is passed on to Takasbank pursuant to article 78, paragraph 2 of the Law. Takasbank gains right of ownership the instant that the agreement is established and upon transfer of collateral assets, in compliance with legal procedures.

(2) If due to default or other reasons stipulated in the respective regulation or provisions of the agreement, it is the case that collaterals are met from Takasbank's receivables, Takasbank has the right to sell the collateral asset at the exchange or if quoted at other organized market, at no price less than the value at such market, and to meet its receivable from sales proceeds or deduct value of these instruments from the debtor's obligations, without issuing any warning or notice, granting a period, obtaining permit or approval from judiciary or administrative authority, fulfilling a preliminary requirement such as cashing in the collateral through auction or another way.

(3) Pursuant to article 78 of the Law as the ownership of the collaterals belong to Takasbank, rights arising from the collateral also belong to Takasbank. Takasbank returns collaterals along with their rights at the end of maturity, provided that obligations are met, pursuant to provisions of Central Counterparty Regulation article 27 and upon Member request.

Collateral Agreement

ARTICLE 32- (1) If dematerialized capital market instruments become subject matter of collateral, pursuant to article 47 of the Law, a written collateral agreement is arranged between Takasbank and the Member.

(2) It is possible to agree to transfer ownership of collaterals to Takasbank in collateral agreements that address dematerialized capital market instruments. Upon agreeing to transfer ownership of collaterals, Takasbank gains ownership right the instant that the agreement is established and upon transfer of collateral capital market instruments in compliance with legal procedures.

(3) If due to default or other reasons stipulated in the respective regulation or provisions of the agreement, it is the case that collaterals are met from Takasbank's receivables, Takasbank has the right to sell the collateral asset at the exchange or if quoted at other organized market, at no price less than the value at such market, and to meet its receivable from sales proceeds without issuing any warning or notice, granting a period, obtaining permit or approval from judiciary or administrative authority, fulfilling a preliminary requirement such as cashing in the collateral through auction or another way. Takasbank also has the right to deduct value of collateral capital market instruments from the debtor's obligations, provided that it has assumed ownership of collaterals.

(4) The rights borne from collateral assets, belong to the provider of collateral. However, if with the agreement signed between Takasbank and the collateral provider, transfer of the ownership of collaterals to Takasbank has been agreed subject to article 47 of the Law, the rights borne from the collateral belong to Takasbank. Takasbank returns collateral along with rights borne provided that obligations are served, pursuant to provisions of Central Counterparty Regulation article 27 and upon Member request.

Monitoring and managing collaterals

ARTICLE 33- (1) Collaterals associated with positions in risk groups are followed separately in accounts associated with the client. Excess margin in one risk group, cannot be used to close out margin deficit arising from positions in another risk group or resolution of default. Provision of article 78, paragraph 3 of the Law is reserved.

(2) The Member is obliged to close out its debt arising from margin call and settlement obligation until the deadline as per this procedure. Otherwise the Member is considered to have defaulted without any notice, if there is, cash credit is not paid and default provisions are applied to the Member.

(3) Members may serve margin call requirements by depositing collateral into respective position accounts. Processes involving collateral deposit, withdrawal, valuation, account mark-to-market and fulfillment of obligations, are executed based on position account.

(4) Pursuant to article 79 of the Law Takasbank's right and power over the value of assets that it has received as collateral due to transactions it executes as central counterparty, cannot be restricted in any way. Absence of Member's power of disposal over the collateral asset does not obstruct Takasbank's bona fide real right acquisition. Third persons' claims or limited real right claims over the value of collateral asset cannot be claimed against Takasbank.

(5) With respect to the collateral provider granting of concordato period, approval of its concordato, granting of concordato period after bankruptcy, entering concordato period by abandoning assets, restructuring through settlement, bankruptcy, postponement of bankruptcy and enforcement proceedings under 2004 no Execution and Bankruptcy Law or provisions of the Law on gradual liquidation cannot in any way restrict Takasbank's right and powers over the collateral.

Collateral deposit and withdrawal transactions

ARTICLE 34- (1) Collateral deposit /withdrawal transactions are executed through Member screens and over Takasbank applications, under the framework of the principle of existence of different authorized users entering deposit/ withdrawal instructions and approving this instruction, in two stages. Collateral deposit, withdrawal transactions are executed in electronic environment.

(2) Collateral deposit and withdrawal transactions are executed by electronic delivery from/ to member current accounts belonging to respective asset. If following mark-to-market of accounts, collateral amount in an account exceeds required margin amount, the excess portion may be withdrawn. If there is not sufficient collateral in the respective account, withdrawal requests are denied.

(3) Withdrawal of margin requirement amount in the respective account is not allowed. Collateral is not withdrawn from accounts that are obliged to post margin.

(4) During the collateral withdrawal controls carried out during the session, while calculating withdrawable collateral, margin requirement is deducted from total margin held in accounts with Takasbank at the instant of calculation.

(5) Collateral deposit and withdrawal transactions are executed via collateral deposit/withdrawal screens between current accounts and margin accounts at the hours that Takasbank system is open. However the collaterals to deposit must be available in the respective current accounts.

(6) It is essential that transactions are executed with user name and passwords allocated to the personnel authorized by members, and during the hours announced by Takasbank. However in mandatory circumstances transaction may be executed by instructing Takasbank in writing until 17:30.

(7) The last hours of depositing and withdrawing on the basis of collateral are as follows.

Assets Eligible as Trade Margin	Full Day Deposit Deadline	Half Day Deposit Deadline	Full Day Withdrawal Deadline	Half Day Withdrawal Deadline
Cash (Turkish Lira)	19:00	12:45	15:40	11:40
Convertible Currency (USD/EUR/GBP)	19:00	12:45	19:00	12:45
Government Debt Securities	19:00	12:45	19:00	12:45
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	19:00	12:45	19:00	12:45
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	19:00	12:45	19:00	12:45
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	19:00	12:45	19:00	12:45
Shares in BIST100 Index	19:00	12:45	19:00	12:45
Equity umbrella fund shares	19:00	12:45	19:00	12:45

Debt instruments umbrella fund shares	19:00	12:45	19:00	12:45
Standard gold traded on the exchanges	19:00	12:45	19:00	12:45
Borsa Istanbul A.Ş. Shares	19:00	12:45	19:00	12:45

(8) The last hours for depositing and withdrawing collateral except for Turkish Lira are for transfers between accounts at Takasbank. The relevant payment system / custodial institution's operation business rules apply for transfers from outside or from Takasbank.

Accrual of Interest On Cash Collateral And Guarantee Fund Contribution Amounts

ARTICLE 34/A (1) The collateral and guarantee fund contributions in cash Turkish Lira deposited by the members are valued over the amount remaining after deducting the portion to be maintained as compulsory reserve, with the best possible conditions by Takasbank by taking the credit risk and liquidity conditions into consideration. The accrual process is performed within the limits of Takasbank by way of depositing the amount subject to the interest to the banks as either deposit or depo and making it subject to a repo transaction. Takasbank can also place the cash collateral to the organized money markets for interest accrual purposes. Interest accrual may not be made in extraordinary market conditions. Should the interest accrual be failed to be made by Takasbank due to the market conditions, no interest shall be paid.

(2) The interest accrual process of trade margin and guarantee fund contributions is performed over the member's Turkish Lira-denominated cash collateral balances at 15:40. No interest shall be accrued on cash Turkish Lira collateral deposited after 15:40 to Takasbank as collateral. Interest accrual deadline on half business days is 11:40 and no interest shall be accrued on Turkish Lira collateral deposited after that time.

(3) The balance remaining after deducting the Bank and Insurance Transaction Tax (BITT) and other legal charges and the amount to be collected by Takasbank as "collateral monitoring and interest accrual fee" at a rate proposed by Takasbank and deemed appropriate by the Board from the gross interest amounts earned from accrual of interest on the amount of collateral and guarantee fund contributions remaining after setting aside the compulsory reserve obligation, if any, shall be credited to the relevant accounts as interest.

(4) Members wishing no interest should convey their request to Takasbank in writing.

CHAPTER SEVEN

Guarantee Fund Principles

Guarantee Fund and general principles

ARTICLE 35- (1) Takasbank establishes a guarantee fund consisting of contribution shares of members, under CCP service it shall provide at the Market, to be used for the portion of losses that may be incurred in the event of members' default, in excess of respective member margins. CCP members' participation in the guarantee fund is mandatory.

(2) CCP members' guarantee fund contribution shares consist of deposited and additional guarantee fund contribution shares to be deposited upon Takasbank's request. If Guarantee Fund is used subject to the provisions of CCP Regulation, Directive and Procedure, CCP members may be asked to deposit additional contribution share not exceeding deposited guarantee fund contribution amount. Members may be asked to deposit additional contribution share at the most 4 times during the one-year period

between 1 April-31 March dates. Additional guarantee fund contribution share that may be requested at one time cannot exceed the guarantee fund contribution share amount calculated per member to be deposited in the month that the defaults constituting the basis for the request, have occurred. Additional guarantee fund contribution amount may be requested more than once on the condition of not exceeding the total amount deposited at once or in slices.

(3) For the CCP member that has requested the termination of its membership and has notified Takasbank in writing that the member has fulfilled all obligations under the Procedure and other regulations but whose request has not yet been approved by the Board of Directors or whose request for termination of its membership has been approved by the Board of Directors but has been allotted time for the return of its deposited guarantee fund contribution, the maximum guarantee fund obligation for which it may be liable on and after the date on which the member submitted its request for the termination of its membership shall be either two-fold of such member's the guarantee fund amount updated on the first business day of the month in which the request was made in case of existence of no continuing default whose resolution still continues as of the request date, or shall otherwise be three-fold. If the member's request for termination of its membership is submitted without first fulfilling all its obligations under the Procedure and other regulations, these rates shall be applied as three and four times. Institutions considered to have terminated or requested the termination of its CCP membership to avoid from any possible guarantee fund obligation may not be re-accepted to the CCP membership.

(4) Guarantee fund contribution shares of other Members cannot be referred to unless trade margins, guarantee fund contribution of defaulted Member, and Takasbank's capital allocation for risks covered at the Market is inadequate.

(5) If the member is dismissed, subject to article 33 of Central Counterparty Regulation guarantee fund contribution share is returned.

(6) Assets in guarantee fund cannot be used beyond the objective.

(7) It is essential that contribution shares to be deposited by members into the guarantee fund are covered from assets under their ownership.

(8) Guarantee fund is represented and managed by Takasbank.

Size of guarantee fund and amount of contribution share to be delivered from members

ARTICLE 36- (1) The size of guarantee fund cannot be less than larger of the resource requirement that shall arise from simultaneous default of the Member who has the largest required collateral obligation and members who have second and third largest required collateral obligations, under stress conditions. The respective resource requirement consists of the portion of Member risks remaining outside the part met with trade margins. In the estimation of risk under stress conditions with statistical methods respectively 99.9% statistical confidence level, 2 business days holding period and 5 years historical data are used.

(2) In calculating the size of the guarantee fund to be established end-of-day margin requirements at least for the past one year, are used. If adequate data is not available, Takasbank may set the minimum size with a shorter data set.

(3) The capability of the existing guarantee fund is tested by renewing the calculation regarding total size of guarantee fund for no longer than 3 months

(4) Members' guarantee fund contribution shares consist of deposited and additional guarantee fund contribution shares to be deposited upon demand.

(5) Deposited guarantee fund contribution shares consist of fixed and variable guarantee fund contribution shares.

(6) A member's deposited guarantee fund contribution share cannot be less than fixed contribution amount. The fixed contribution share that members must deposit is 50,000 TRY. This amount is revised at least once a year in light of developments across the Market, domestic or global economy and may be changed if seen necessary. Variable contribution shares consist of consecutive ranges with lower and upper limits.

(7) In calculating guarantee fund contribution share that each member must deposit, members' average margin requirements for the previous month, are taken into account. In attaining total guarantee fund contribution share that the member must deposit, guarantee fund risk value which is calculated by multiplying average collateral amount for members with the risk multiple to be set, is employed.

(8) Risk multiple that shall be employed in calculation of guarantee fund contribution share is calculated quarterly in light of market conditions and announced with a general letter along with other parameters thereof. If deemed necessary, Takasbank may revise risk multiple in line with market conditions without waiting for the end of 3-month period.

(9) Ranges that belong to guarantee fund risk values and corresponding guarantee fund contribution amounts are provided below.

Calculation Range	Guarantee Fund Risk Value (TRY)	Total Contribution Share (TRY)
1. Range	0-50 Thousand	50 Thousand
2. Range	50-60 Thousand	50 Thousand + (2-1) * 10 Thousand
3. Range	60-70 Thousand	50 Thousand + (3-1) * 10 Thousand
4. Range	70-80 Thousand	50 Thousand + (4-1) * 10 Thousand
n.(*) Range	Previous range + 10 Thousand	50 Thousand + (n-1) * 10 Thousand

(*)The range, which corresponds to guarantee fund risk value

(10) Guarantee fund contribution requirements are calculated on the last business of each month and updated as of the first business of the following month.

(11) Guarantee fund contribution share calculations of members may be performed in light of respective Members' risk situation and Market conditions, without waiting for the first business day of the subsequent month.

(12) Guarantee Fund Contribution Share requirement notifications are issued via messaging member screens provided by Takasbank to members, reporting and email. If guarantee fund contribution share requirement notification is issued via the system, without the need for further warning and notice, it is considered that the member has received the call. The member's responsibility starts the instant that the call issued by Takasbank reaches the member. The deadline for meeting the call requirement is 3 business days. If the respective requirement is not met within the deadline, the member is considered to have defaulted.

Assets eligible as guarantee fund contribution share and contribution share top-up requirement

ARTICLE 37- (1) The assets eligible as guarantee fund contribution share and related composition limits are shown in the following table. Takasbank Board of Directors is authorized to determine assets, which shall be eligible collateral, and compositions limits for such assets or change composition limits including those set with this Procedure.

Assets Eligible to Guarantee Fund	Group Limit	Sub-group Limit (As group limit percentage)
Cash (Turkish lira)	En Fazla 100%	-
Convertible Currency (USD/EUR/GBP)	En Fazla 100%	-
Government Debt Securities	En Fazla 100%	35% (Based on ISIN)
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	En Fazla 100%	35% (Based on ISIN)
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	En Fazla 50%	40% (Based on ISIN)
Shares in BIST100 Index	En Fazla 90%	20%
Equity umbrella fund shares	En Fazla 50%	20%
Debt instruments umbrella fund shares	En Fazla 50%	20%
Standard gold traded on the exchanges	En Fazla 25%	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	En Fazla 50%	40%
Borsa Istanbul A.Ş. Shares	En Fazla 50%	-

(2) In calculating the collateral values of the assets eligible as collateral against the central counterpart and/or clearing and settlement service, the following valuation haircuts shall be taken as a basis.

(3) Non-cash assets used as guarantee fund contribution share, are subject to valuation at the end of the day over prices determined by Takasbank, to ensure that they are valued as recent market prices. Following valuation conducted on daily basis, Guarantee Fund Contribution Share requirements are delivered to members via messaging member screens provided to the members by Takasbank, reporting and email. If Guarantee Fund Contribution Share margin call is sent to a member via the system without any further warning and notice, it is considered that the member has received the call. The member's responsibility starts the instant that the call issued by Takasbank reaches the member. The deadline for meeting the call requirement is 3 business days. If the respective requirement is not met within the deadline, the member is considered to have defaulted.

Principles of Guarantee fund use

ARTICLE 38- (1) In default management, when resources available for use until article 36, first paragraph, (d) section of Takasbank Central Counterparty Regulation fall short, and it is understood that guarantee fund contribution shares deposited in cash shall fall short, non-cash guarantee fund contribution shares that

belong to solvent members are started to be cashed in.

(2) Contribution shares deposited by members, who joined guarantee fund after the occurrence of respective default, or by existing members against risks they took after the occurrence of default, are not expended.

(3) In cases, which require resorting to guarantee fund withdrawal of contribution share from guarantee fund, is not allowed within the period until recovery of the default loss.

(4) Resorting to contribution shares is started from the most liquid asset, based on highness of ability to convert to cash. Cash amounts converted from non-cash collateral in the guarantee fund but unused, are returned to members using non-cash collateral on pro-rate basis.

(5) Distribution of loss to be attributed to guarantee fund is based on share of members in guarantee fund.

(6) Members are obliged to re-deposit, deposited guarantee fund contribution share amounts expended under default management, in 3 business days

(7) If it is thought that the loss that shall be attributed guarantee fund may possibly exceed 50% of the fund size, members may be asked to deposit committed additional contribution share. Members are obliged to deposit additional contribution shares in 5 business days following the demand. Additional contribution shares, which have been partially used or not at all used to close out the respective default, are returned. If returned without using to close-out the default notwithstanding the demand, additional guarantee fund contribution share demand is considered to have not happened.

(8) Additional guarantee fund contribution share that may be demanded from the Member for one month period, cannot exceed the guarantee fund contribution share amount calculated and should be deposited for that month.

(9) If additional guarantee fund contribution shares demanded from members due to default, are partially or fully expended, members are asked to replenish their guarantee fund requirements up to the amount calculated pursuant to article 36. Within the same month, guarantee fund contribution shares exceeding maximum loss limit that the Member shall bear in case of other members' default, are expended until end of the month only for its own default. Normal guarantee fund contribution amounts that shall be demanded from members ,who have fulfilled additional guarantee fund contribution share requirements within one year period between 1 April- 31 March, are expended only for their own defaults until the current period is completed.

CHAPTER EIGHT

General principles Principles of Default Transaction

ARTICLE 39- (1) Debts arising from trades executed at the market, become due in the following circumstances.

- a) Arrival of debt's value date or maturity;
 - b) Failure to meet end-of-day margin call requirements calculated by Takasbank on the evening of the preceding business day until 15:00 (including 15:00);
 - c) Failure to meet guarantee fund and additional guarantee fund contribution shares margin call requirements within the deadline as per this Procedure;
 - ç) Deciding that the Member's requirements shall be liquidated by Takasbank under article 9 of the Directive.
- (2) If on the date that the debt becomes due, obligations are not served in accordance with the

procedure and principles as per the Procedure, the Member falls into default without separate notice. If the member defaults due to debt that has become due, entire debts of the member become due.

(3) In case of default, Takasbank does not allow withdrawal of collateral from the Member's respective accounts. Takasbank may ask Borsa to block routing orders over the Member's accounts.

(4) At the most time until end of the business day following default may be granted by Takasbank to the Member to end default. If default is not ended until the end of deadline, Takasbank may trade at organized and OTC markets to source the defaulted amount. To be able to execute the trade, member's trade margin and guarantee fund contribution shares may be used.

(5) If collateral and guarantee fund requirements are not met within the deadline as per this Procedure, default interest is applied.

(6) Members who meet their ;

a) Cash obligations arising from trades executed at the market after 16:45,

b) Margin requirements arising from trades executed at the market after 15:00, are considered to have defaulted without the need for any notice.

(7) Default interest that shall be received from members fulfilling their requirements after the set time on the settlement date is differed from members fulfilling the obligation on the following day.

(8) In fulfillment of cash requirements, for EFT payments transfer time of the funds to Takasbank's TIC account with CBRT, and in payments via transfer from accounts with Takasbank, transaction time, are taken into account.

Default on collateral

ARTICLE 40- (1) In defaults on collateral that occur on trade value date, provided that limits as per article 36 of Central Counterparty Regulation and market liquidity constraints are reserved, Takasbank's financial liability is restricted to fulfillment of margin requirement on value date from settlement receivable and completion of settlement; if the trade cannot be completed on value date, limited with the period until end of default, interest amount calculated over trade interest.

(2) It is essential in trades executed at the Market that in the event of default of member obliged to deliver margin, the trade belonging to the member providing funds is executed. If margin debt is fully provided, the trade is considered to have been executed on the same day without prejudice to default provisions of margin obligor. In case of partial margin payment, the trade is considered to have been executed to the extent of paid margin amount. Default provisions are applied for the unexecuted trade amount.

(3) The obligation of Member who does not end default until the given deadline, is met from settlement dues, if there is a deficit, from initial margin and guarantee fund and if required from other default resources. Takasbank may also execute opposite trade at the market to resolve the default. The trade is considered to have been cancelled for the amount which cannot be collateralized by executing opposite trade or using default management resources until the end of business day following default if extra time is not given to the member to resolve default, and until the set time on the business day following the deadline if extra time is given. Unexecuted trade amount is paid along with the default penalty of cancelled trade amount to the member receiving compensation.

Cash default at trade or maturity date

ARTICLE 41- (1) In cash defaults occurring on trade value date, provided that the limits as per article 36

of Central Counterparty Regulation and market liquidity constraints are reserved, Takasbank's financial liability is restricted with payment of cash on settlement date; if cash cannot be paid on settlement date, depending on market conditions and Takasbank's liquidity facilities, payment subject to the following procedure and principles and in addition to this grievance payment that shall be calculated until the payment date.

- a) If cash debt is partially or fully fulfilled, on the same date settlement receivable is paid.
- b) Takasbank tries to provide fund from organized and/or OTC markets at best effort by also using initial margin of the Member, who did not end the default until the end of deadline, and guarantee fund, to ensure that the receivable amount is paid to the cash recipient.
- c) The trade is considered to have been cancelled for the amount, which has not been obtained until the end of business day following default in case additional time is not given for the resolution of the default, and until the set time on the business day following the given deadline, if extra time is given.

(2) In cash defaults occurring on trade maturity, provided that the limits as per article 36 of Central Counterparty Regulation and market liquidity constraints are reserved, Takasbank's financial liability is restricted with payment of cash on maturity date; if cash cannot be paid on maturity date, depending on market conditions and Takasbank's liquidity facilities, payment subject to the following procedure and principles and in addition to this grievance payment that shall be calculated until the payment date.

- a) If cash obligation is partially or fully fulfilled the settlement receivable is paid on the same day. Takasbank tries to source funds at best effort through sale of collateral or from organized and/or OTC markets by using blocked collateral of Member, who has not ended default until the end of deadline, and guarantee fund as well, to ensure that the receivable among is paid to the cash creditor.
- b) The trade is considered to have been cancelled for the amount, which has not been obtained until the end of business day following default in case additional time is not given for the resolution of the default, and until the set time on the business day following the given deadline, if extra time is given. Collateral as much as the cancelled trade amount is met from the trade margin of the defaulted member and guarantee fund, if not enough, from default management resources and delivered to the cash recipient member. In collateral valuation, the price set by Takasbank is used.

(3) In case of cash default, pursuant to provisions of article 42, default interest is applied. Compensation payment is made to the cash delivery creditor with respect to the undeliverable part, up to $\frac{3}{4}$ of collected default interest amount for the period until cash delivery is fully completed. If the calculated interest amount remains below minimum default penalty, compensation payment is made over the calculated amount.

(4) Cash delivery obligor is obliged to pay such cash along with default interest, which shall be calculated subject to article 42.

(5) The provisions as per this article are applied as well to cash defaults, which occur due to debt becoming due before trade maturity.

Default Interest

ARTICLE 42- (1) Default interest calculated over not fulfilled obligation amount taking into account the periods as per paragraph 3 of this article, and other legal obligations are collected from members who don't fulfill their settlement, collateral and guarantee fund requirements within the deadline.

(2) In calculating default interest, calendar days between the date of default and the date the requirement was met, is taken into account. Default interest is calculated over 1 day for obligations fulfilled after the deadline on the settlement date but on the same day.

(3) The amount of default interest applicable to the member who fell into default, is the amount not fulfilled obligation calculated based on highest of the O/N weighted average interest rates at BIAS Repo, Reverse Repo Market, CBRT Interbank Money Market or Takasbank Money Market, treated with the following multiples.

OBLIGATION TYPE	TIME INTERVAL	MULTIPLE
Cash Settlement	After 16:45 with same day value	0,50
	After value date	2
Default On Collateral And Guarantee Fund	After 15:00 with same day value	0,50
	After value date	2

(4) Lower limit and upper limit is applied to default interests to collect. For 2016 these limits are amounts applied for Borrowing Instruments Market default transactions. These limits are determined by the Board of Directors in light of revaluation rates announced every year by Ministry of Finance and announced to member before the application.

Lower limit	If the calculated default interest is less than lower limit amount; the set lower limit amount is collected.
Upper limit	If the calculated default interest is more than the upper limit set in relation the respective time interval; the set upper limit amount is collected.

(5) Upper limit is not applied for obligations not fulfilled on the same day.

(6) Minimum default base amount is not applied at the Market.

(7) If Takasbank has incurred a loss exceeding default interest due to partial or no performance of the debt, this loss is compensated by the defaulted Member.

(8) Default Interest is calculated with the following formula; Base amount * (Benchmark interest/100 * multiple) * (days/365).

Accrual, notification and collection

ARTICLE 43- (1) Accrued default interest is paid in 1 business day from the accrual date along with other legal obligations.

(2) The member is notified regarding accrued default interest. Default interest which has not been deposited by the member within the deadline despite accrual, and other legal obligations, are automatically collected by Takasbank the following business day from the member's current account.

Default management process

ARTICLE 44- (1) The respective default of the Member, who failed to promptly fulfill settlement obligation and whose settlement obligation cannot be fulfilled in the period specified in the Procedure by Takasbank following trades executed at the market, is notified to Borsa, the Board and the respective Member pursuant to article 13 of CCP Regulation and the Member's powers to execute any kind of transaction over its accounts are suspended.

(2) Takasbank may apply one or several of the following measures and bound with these, with respect to the defaulted Member subject to the relevant articles of Central Counterparty Regulation. The reason of default and its effects on the markets are considered while using default management tools.

- a) Migration of open positions in solvent client accounts along with their collaterals to a Member fully or partially solvent in accordance with article 26 of Central Counterparty Regulation;
- b) Cashing in non-cash collaterals in the defaulted Member's proprietary portfolio and associated clients accounts short of margin, and guarantee fund contribution shares;
- c) Use of excess margin that belong to the Member at other markets,
- ç) Use of guarantee fund contribution shares belonging to the Member at other markets, on the condition that it carries no risk in the respective Market,
- d) Acting in accordance with article 38 of this Procedure for use of guarantee fund contribution shares belonging to solvent Members,
- e) Migration of client positions and collateral automatically or upon client demand without seeking defaulted Member's consent, to other members,
- f) Automatic closing-out of positions,
- g) Netting debit, credit, position, collateral, right and obligations with the same party.

(3) The deficits that arise after application of default provisions as per this Procedure and provision of Fifth Section of Central Counterparty Regulation to the defaulted Member and which cannot be fulfilled with the collateral that belongs to defaulted Member and guarantee fund contribution shares, are defined as loss of Takasbank and other members and assumed in the order as per paragraph 1, article 36 of Central Counterparty Regulation. The collections that shall be later made from the defaulted Member, are distributed pursuant to article 36, paragraph 5 of Central Counterparty Regulation.

(4) In case the capital allocated to covered risks subject to article 36 of Central Counterparty Regulation, is expended due to default, the reduced amount is replenished within a month. Allocated capital amount replenished during 1 year period as such, cannot exceed the amount established at the beginning of the period. In case a default is experienced again during the 1 month period until replenishment of the reduced capital, if there is, the remaining part from the allocated capital is used. Guarantee fund of solvent members is resorted to for the part that falls short. Replenishment of capital does not require return of used guarantee fund contribution shares.

Compensation Payment

ARTICLE 45- (1) Compensation payment is issued on the terms as per paragraph 5 to the member to, whom delivery or payment cannot be issued on settlement date, due to the member that has fallen into default in fulfillment of its commitment. However, compensation payment is not issued for late delivery and payments on the same day.

- (2) Member request is not sought to issue compensation payment. If the member not wishing to receive compensation payment notifies Takasbank of this request in writing, it is not issued a payment.
- (3) In return for late days, payment is issued to the member to whom payment or delivery has not been issued due to defaulted Member, at the rate as per paragraph 4 of this article of default penalty collected from defaulted member.
- (4) Compensation payment is issued to cash creditor members for payments that have not been issued

on value date, based on calendar days between value date and payment or delivery date, at the amount calculated as $\frac{3}{4}$ of highest of O/N weighted average interest rate at repo-reverse repo markets where government securities are traded under Borsa, CBRT Interbank Money Market or Takasbank Money Market.

- (5) To be able to issue compensation payment;
 - a) If the defaulted member has objected in writing the objection should have been accepted invalid and collection of default interest should have been decided,
 - b) The delivery or payment should not have arisen from issues that occurred at Borsa, Takasbank and CBRT system.
- (6) Compensation payments are issued to members' current accounts with Takasbank.

Objection to default

ARTICLE 46- (1) The member accruing default interest, may object to Takasbank on grounds that the default has occurred due to reasons arising from settlement, respective central clearing system and payment system without its wrongdoing, or material error has been made in calculation of default interest.

- (2) Objections are filed with a letter and documents related to the objection attached, latest within 1 week from default accrual date.
- (3) The post-assessment decision on the objection of defaulted member is delivered by the CCP Default Committee established under Takasbank.
- (4) If the objection filed by the member is justified, default interest is not paid, if collected the respective amount is returned to the member. If compensation payment has been made, the respective amount is automatically taken back from the counter-member.
- (5) In case the objection is denied, the decision is notified to the respective member in writing.
- (6) The objection does not stop payment of default interest within the deadline.

CHAPTER NINE

Final Provisions

Fees and commissions

ARTICLE 47- (1) Provisions of article 35 of General Regulation are applied with respect to fees and commissions that Takasbank shall apply to its Members in relation to services it provides under this Procedure.

Disciplinary provisions

ARTICLE 48- (1) In addition to the provisions of Directive and Procedure, disciplinary provisions as per Section Seven of Central Clearing Regulation are additionally applied with respect to Members, who don't comply with the obligations specified in this Procedure.

Measures to take during extraordinary circumstances

ARTICLE 49- (1) Takasbank is authorized to determine the measures to take and apply in the face of extreme situations, where it foresees that settlement transactions or markets shall be adversely affected. In

such circumstances, it is authorized to take measures as per article 48 of Central Counterparty Regulation.

Announcements

ARTICLE 50- (1) The details and changes with respect to the matters covered by the Procedure, are announced to the member by Takasbank.

Change of system rules

ARTICLE 51- (1) Takasbank is authorized to change system rules. Where change of system rules is subject to approval of authorities in accordance with the respective regulation, the changes are implemented after such approval.

(2) In case that required change of infrastructure, a reasonable period of time before implementation of changed Members are informed to ensure that they can make necessary arrangements.

Applicable provisions where there is no provision in the Procedure

ARTICLE 52- (1) In case where there is not provision in the Procedure provisions of Central Clearing Regulation and Central Counterparty Regulation are applied.

TEMPORARY ARTICLE 1- (1) Sub-Group Limit, set as 40% for mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities, is to be applied as 100% until 31/12/2019.

Taking effect

ARTICLE 53- (1) The procedure takes effect on its release date.

Enforcement

ARTICLE 54- (1) The provisions of the Procedure are enforced by the General Manager.