ISTANBUL SETTLEMENT AND CUSTODY BANK INC.

BORSA ISTANBUL PROCEDURE ON EQUITY MARKET CLEARING AND SETTLEMENT AND CENTRAL COUNTERPARTY SERVICE PRINCIPLES

CHAPTERONE

General Provisions

Purpose

ARTICLE 1 - (1) The purpose of this Procedure is to stipulate the principles and procedures regarding membership, collateral, clearing and settlement, default, discipline, revenues and other issues related with the clearing and settlement and central counterparty services to be provided for BİAŞ Equity Market by Istanbul Settlement and Custody Bank Incorporation as the central clearing agency.

Scope

ARTICLE 2 - (1) This Procedure covers the matters regarding membership, collateral, clearing and settlement, default, discipline, revenues and other issues related with the clearing and central counterparty services to be provided for BİAŞ Equity Market by Istanbul Settlement and Custody Bank Incorporation as the central clearing agency.

Basis

ARTICLE 3 - (1) This Procedure has been prepared in accordance with the articles 77 and 78 of the Capital Markets Law no. 6362 published in the Official Gazette no. 28513 dated 30.12.2012, article 10 of the Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions published in the Official Gazette no. 28690 dated 27.06.2013 and Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation published in the Official Gazette no. 28711 dated 18.07.2013, Istanbul Settlement and Custody Bank Inc. Central Counterparty Regulation published in the Official Gazette no. 28735 dated 14.08.2013, the Regulation on Activities of Payment and Securities Settlement Systems published in the Official Gazette no. 29044 dated 28.06.2014, and the Directive on Istanbul Settlement and Custody Bank Inc. Borsa Istanbul Inc. Equity Market Clearing and Settlement and Central Counterparty Service Principles.

Definitions and Abbreviations

ARTICLE 4 - (1) Terms used in this Procedure shall bear the following meanings;

- a) Open offer method: The method where Takasbank interposes itself between the Market participants and becomes buyer against the seller and seller against the buyer at the time the transaction is matched.
- b) Exchange/BİAŞ: Borsa Istanbul Incorporation.
- c) Multiple position account: The accounts opened at Takasbank in the name of the CCP members, where positions of the members' proprietary portfolio or of their customers are aggregately monitored but where, in any event, the own positions of the CCP member and the positions of its customers are segregated.
- c) Appreciated collateral: The amount of the total deposited collateral calculated by applying of

margin haircuts, group limits and sub-group limits.

- d) General Manager: The General Manager of Istanbul Settlement and Custody Bank Inc.
- e) General Regulation: The General Regulation on the Establishment and Operating Principles of the Central Clearing and Settlement Institutions published in the Official Gazette dated 30/05/2013 and numbered 28662.
- f) Intra-day risk calculation: Risk and collateral valuations made by using the last balances and prices of collateral and positions determined during the day.
- g) Trading Institution: An institution authorized to trade in the market but executes settlement of the obligations of such trades through intermediation of a general CCP member.
- ğ) Law: The Capital Markets Law No. 6362 published in the Official Gazette dated 30/12/2012 and numbered 28513.
- h) Board: The Capital Markets Board.
- 1) CRA: The Central Registry Agency Incorporation.
- i) CCP: The Central Counterparty.
- j) Securities: Any type of capital market instrument traded at Borsa Istanbul Equity Market and defined as securities in the Capital Markets Law no. 6362.
- k) Central Counterparty Regulation: Istanbul Settlement and Custody Bank Incorporation Central Counterparty Regulation published in the Official Gazette dated 14.08.2013 and numbered 28735.
- l) Central Clearing and Settlement Regulation: Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation published in the Official Gazette dated 18.07.2013 and numbered 28711.
- m) Equity Share: Any security representing the capital of the partnership and entitling its holder to the shareholding right.
- n) Market: Borsa Istanbul Inc. Equity Market.
- o) Position: The settlement payables and receivables arising in relation to the transactions executed in the Market.
- ö) Procedure: The implementing principles that include the procedures for operation and practices in accordance with the rules and principles stipulated in the Directive and approved by the General Manager.
- p) System: Takasbank system established for clearing and settlement of the transactions being executed in BİAŞ Equity Market.
- q) Settlement: The definition of clearing and settlement as set out in the Law no. 6493 on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions and in the Central Counterparty Regulation.
- s) Takasbank: Istanbul Settlement and Custody Bank Incorporation.
- s) Single position account: The accounts held as sub-accounts of the accounts opened at Takasbank in the name of the CCP members, where positions of the members' proprietary portfolio or of their single customer are monitored.
- t) Collateral accounts: The accounts opened at Takasbank in the name of the CCP members, where collateral required to be maintained by the members due to the positions of their proprietary portfolio or of their customers is monitored.

- u) Collateral received for settlement: The amount collected from the members for the securities to which CCP service is not provided in an effort not to get affected from the risk of any price change of such securities subject to default during the time period elapsed from the occurrence of an event of default to its resolution.
- ü) CBRT: The Central Bank of the Republic of Turkey.
- v) Member: The CCP members that are allowed, pursuant to article 6 of the Central Counterparty Regulation, to become a party to the clearing and settlement services provided by Takasbank as the central counterparty in the Market.
- y) Directive: The Directive on Istanbul Settlement and Custody Bank Inc. BİAŞ Equity Market Clearing and Settlement and Central Counterparty Service Principles.
- z) Board of Directors: The Board of Directors of Takasbank.

CHAPTER TWO

Principles for Membership

Membership

ARTICLE 5 - (1) The investment institutions satisfying the conditions set forth in article 8 of the Directive may become a member to the CCP service to be provided by Takasbank in the System for the transactions executed in the Market provided that they are authorized by the Board of Directors.

Membership types

ARTICLE 6 - (1) The members are divided into two groups as direct CCP member and general CCP member.

- (2) Direct CCP members are authorized to perform only the clearing and settlement transactions of themselves and/or of their clients.
- (3) In addition to the clearing and settlement transactions of themselves and/or of their clients, the General CCP members are also authorized to perform the clearing and settlement transactions of the trading institutions.
- (4) The general and direct CCP membership classification is made by taking the amount of equity capital of the member, the adequacy of its internal systems and technical infrastructure into consideration as well as the internal rating studies, financial analysis and intelligence carried out by Takasbank.
- (5) Members trading in the market are considered as a direct CCP member so long as they do not request a status change.
- (6) Applications for general CCP membership in the Market starts with the date of entry into force of the Procedure.

Transition between membership types

- **ARTICLE 7** (1) The membership status of the general and direct CCP members may be changed by pursuing the compliance of the members with the conditions set forth by Takasbank. In this context, a direct CCP member may be accepted later as a general CCP member, whereas a general CCP member may also be accepted as a direct CCP member.
- (2) General CCP members may make an application to become a direct CCP member. The applications filed by the general CCP members in this direction may be accepted by Takasbank provided that all rights, obligations and accounts relating to the trading institutions, if any, of which they perform their clearing and settlement transactions are transferred or liquidated.

- (3) The applications filed for general CCP membership by the direct CCP members satisfying the general CCP membership criteria shall be finalized by Takasbank within 2 months. The time period elapsed due to request for additional information and documents shall not be taken into account in the calculation of 2 months' period.
- (4) If the members losing the general CCP membership conditions fail to meet the relevant criteria within the time period set by the Board of Directors from the date the loss of eligibility is notified to them by Takasbank, they may be authorized as a direct CCP member provided that they satisfy the conditions listed in article 8 of the Directive. In this case, transfer to another general CCP member or liquidation of all rights, obligations and accounts relating to the trading institutions, if any, must be completed. Should this requirement be failed to be met, the provisions of article 13 of the Directive shall be applied.

Conditions for the CCP membership

- **ARTICLE 8** (1) The determination and evaluation of the satisfaction of the membership conditions belong to Takasbank, and at least the following conditions should be met for membership in addition to those specified in article 7 of the CCP Regulation.
- a) The conditions for membership of the Central Clearing and Settlement Regulation should be met.
- b) The trading authorization in the Market should not be revoked due to any contradiction to the legislation.
- c) The CCP service-related agreements and/or letter of undertakings whose content is determined by Takasbank should be signed and submitted to Takasbank.
- ç) The financial structure should be at a level capable of fulfilling its commitments against Takasbank.
- d) Other information and documents to be requested by Takasbank should be submitted.
- e) Declaration for data processing, risk management, internal control and internal audit systems compatible with the form specified by Takasbank should be approved and submitted by the Board of Directors of the Members.
- f) The relevant accounts should be opened at Takasbank, the CRA and at the correspondent banks designated by Takasbank.
- (2) In order for the Intermediary Institutions to become a Direct CCP Member, the following conditions should also be met in addition to those listed in the first paragraph.
- a) Becoming a member to the Market at the Exchange in accordance with the Exchange legislation,
- b) Holding a limited or general custody service license pursuant to the relevant legislation,
- c) Having a minimum equity capital of 10.000.000 TRY,
- c) Having at least D credit score as a result of the internal rating conducted by Takasbank.
- (3) In order for the Intermediary Institutions to become a General CCP Member, the following conditions should also be met in addition to those listed in the first paragraph.
- a) Having been obtained the operating license for the general custody service enabling them to provide custody of positions and collateral arising from the transactions being conducted,
- b) Having a minimum equity capital of 75.000.000 TRY,
- c) Having at least B credit score as a result of the internal rating conducted by Takasbank.

- (4) In order for the banks to become a General CCP Member, the following conditions should also be met in addition to those listed in the first paragraph.
- a) Having been obtained the operating license for the general custody service enabling them to provide custody of positions and collateral arising from the transactions being conducted,
- b) Having a minimum equity capital of 500.000.000 TRY,
- c) Having at least B credit score as a result of the internal rating conducted by Takasbank.
- (5) As part of the internal rating study conducted by Takasbank in determining the credit rating of the company, the financial statements of such company, its activity report, company introductory information form, company key information form, its trading volumes in the markets, Turkish Lira custody balances, default and intelligence information, and the credit ratings received from the rating agencies, if any, and the market intelligence information and the news featured in visual and printed media are used. On its web site, Takasbank announces the parameters it takes into account in the internal rating methodology it adopts and the impact of these parameters on the credit ratings.
- (6) Takasbank is authorized to determine the minimum criteria it would seek for technical infrastructure, data processing, risk management, internal control and internal audit systems, to allot time for compliance to the institutions failing to meet the prescribed criteria, to get commitment and to check whether such criteria have been met or not.
- (7) The Board of Directors is authorized to increase the minimum equity capital amounts or to decrease them to their previous levels by taking the relevant capital markets and banking regulations as well as the market conditions into consideration.

Membership application and admission

- **ARTICLE 9** (1) The institutions to be applied for membership are required to submit their application request addressed to the Directorate General of Takasbank together with a letter accompanied by the information and documents verifying the fulfillment of the prescribed conditions for membership in this Procedure and to send the information and documents listed in article 10 of the Central Clearing and Settlement Regulation and the following documents enclosed to aforesaid letter to Takasbank.
- a) Membership application form,
- b) Authorization certificate (its notarized copy),
- c) Document to be obtained from the Exchange to verify that the investment institutions applying for a direct CCP membership are operating in the Market,
- c) Membership Agreement and Pre-Agreement Information Form,
- d) Letter of Undertaking for Cash, Assets, Collateral, Conditional Transfer and Electronic Funds Transfer (EFT) Instruction,
- e) Implementation Agreement for the Customer Instructions to be sent to Istanbul Settlement and Custody Bank Inc. via Fax Machine,
- f) Other documents that may be requested by Takasbank under the relevant legislation.
- (2) For the membership applications to be eligible for assessment by Takasbank, the information and documents listed in the first paragraph of this article as well as other documents that may be requested by Takasbank must have been completed. The filed applications shall be reviewed by Takasbank in terms of whether the conditions specified in article 8 have been met or not. The decision made by Takasbank on the application shall be notified to those concerned in writing within 2 months. The time period being elapsed due to request of additional information and documents shall not be taken into account when calculating the 2 months' period.

- (3) In order to commence its operations at Takasbank, the institution whose membership application is accepted should, within 1 month from the date on which the notice for the approval of its membership application is served;
- a) deposit its membership admission fee,
- b) deposit its membership collateral,
- c) deposit the Guarantee Fund contribution amount,
- c) authorize the personnel who will trade on behalf of the Member on Takasbank system.

Otherwise the membership right granted to the relevant institution shall be revoked. The date on which such obligations are fulfilled shall be deemed to be the date on which the institution has become a member to the central counterparty service provided to the Market, and the Member shall become entitled to trade as of this date.

General obligations of the members

ARTICLE 10 - (1) The Members are required to adhere to the following issues:

- a) Act in accordance with all rules and principles laid down in this Procedure and other relevant legislation for the market clearing and settlement transactions and central counterparty service.
- b) Actin accordance with the principles of integrity and good faith towards their customers and other members,
- c) Deposit the guarantee fund contribution amounts stipulated by Takasbank,
- ç) Take all necessary measures to ensure sustainability of internal control, risk management and internal audit mechanisms necessary to become a CCP member,
- d) When opening a segregated single account, if a transferee general CCP member is predesignated in the event the member accounts and the sub-accounts associated therewith at Takasbank need to be ported, include information about such issue in the framework agreements signed with their members,
- e) When opening a segregated single account, ensure that their customers are informed in a complete and accurate manner about the structure of the accounts where the collateral is monitored and the scope of the segregation provided by Takasbank, and the fact that the disposition power on the collateral accounts opened at Takasbank belongs to the Member and such power is restricted by Takasbank as to be limited exclusively to the collateral required to be maintained,
- f) Immediately inform Takasbank of the customer/customers in whose name a segregated single account is opened in case of presence of any measure and/or trade restriction decisions that may be taken by the Board and of any restriction as such,
- g) Inform their customers of the fact that positions of other customers are also monitored in the multiple customer position accounts, collateral associated with these accounts will be used for total risk arising from the multiple account, and that, it is acknowledged by Takasbank that collateral associated with these accounts belongs to the member,
- ğ) Cover the collateral to be deposited for the portfolio accounts entirely with the assets under their possession,
- h) Cover the collateral to be deposited for the multiple customer position accounts with the collateral under their possession or on which they have gained the right of disposition in accordance with the Law,
- 1) If the collateral deposited for the multiple customer position accounts are obtained from the

customers or other people and institutions through transfer of ownership contracts, establish a sound recording and monitoring system to ensure safekeeping of such transfer of ownership contracts and matching the collateral-provider customers, people and institutions with the collateral deposited to the multiple customer position accounts,

- i) Act in compliance with all rules and principles set forth in the Law and other relevant regulations for monitoring and safekeeping of customer assets and collateral,
- j) Fulfill the dues, fees, commissions and other obligations requested by Takasbank within their time period,
- k) Adapt to the system modifications to be made by Takasbank within the prescribed time periods and participate in the tests,
- l) Facilitate constant reconciliation between the position accounts at Takasbank and the records of the portfolio/customer positions and collateral at itself,
- m) Deposit collateral to the relevant collateral accounts at Takasbank,
- n) Furnish any information and document to be requested on issues deemed necessary by Takasbank and the Board with regard to the business and transactions within the scope of this Procedure, and provide all types of support in the investigations to be conducted by those appointed by Takasbank and the Board,
- o) In addition to the books and records required to be kept legally, keep other records determined by Takasbank, issue the information and documents in due form; and convey them to Takasbank in a periodic manner or at any time requested by Takasbank and maintain such documents and records for a period of 1 year,
- ö) Make notification to Takasbank within 15 days in case of transfer of shares providing direct or indirect management control,
- p) Inform Takasbank of any change in the head office address, Members of the Board of Directors and the General Manager at the latest on the business day following the date on which the change has occurred,
- r) Fulfill other obligations under this Procedure within their time periods and in a complete manner.
- (2) If any Member foresees that it will be unable to either partially or wholly fulfill its obligations, it shall be obliged to notify the situation immediately to the Board and other relevant public entities and institutions together with all substantiating information and documents containing the reasons thereof. Such notification shall not constitute an impediment for Takasbank to take the necessary measures stipulated in this Procedure.
- (3) The members are responsible for the fulfillment of all obligations relating to the transactions they have conducted in accordance with the activities stipulated under the Procedure and for any function performed by their employees pursuant to their duties.
- (4) The direct CCP members are responsible for the settlement of all transactions they have conducted in the Market including those they have conducted on behalf of the collective investment undertakings. The responsibility for the positions transferred to another member through the methods permitted in accordance with the legislation in the Market shall belong to the transferee member.
- (5) The members conduct their transactions via remote access by using the user codes and passwords allocated to the personnel they have authorized. The responsibility arising from the transactions conducted in the system by using the allocated password and from the use of the password by unauthorized people shall belong to the member.

(6) In cases where access to the system is not possible, the transactions may be executed by Takasbank in accordance with the written instructions to be given by people holding authority to represent the member.

Responsibilities of the General CCP Members

- **ARTICLE 11** (l) The general CCP member performing the settlement operations of a trading institution shall be unconditionally responsible towards Takasbank for fulfilling the obligations related to the transactions executed by the relevant institution over itself. The general CCP member performing the settlement operations and the trading institution of whose settlement operations are performed by that member shall be jointly and severally liable as debtor and surety towards Takasbank for the obligations arising from the trading institution's transactions of itself and of its customers that are conducted over the relevant general CCP member.
- (2) A general CCP member shall be in responsible for tracking whether the obligations set forth in article 12 have been fulfilled by the trading institutions whose settlement operations are performed by that member; taking all necessary measures in case it is determined that such obligations have not been fulfilled; and acting in accordance with the provisions set forth in the third paragraph of the same article in case it is determined that such obligations have still not been fulfilled despite the measures.
- (3) The general CCP member shall be relieved from its responsibilities specified in the second paragraph of this article provided that all rights, obligations and accounts of the relevant trading institution towards Takasbank resulting from its transactions conducted in the Market are transferred to another general CCP member or winded-up.

Responsibilities of the Trading Institutions

- **ARTICLE 12** (1) The positions and collateral of the trading institutions are followed in the exclusively opened sub-accounts associated with the general CCP members.
- (2) The trading institutions shall be liable for ensuring the following issues:
- a) Adhere to the arrangements specified in this Procedure for the collateralization procedures and monitoring of positions and collateral at their structure and at the general CCP member,
- b) Act in accordance with all rules and principles laid down in the Law and other relevant arrangements for monitoring and custody of customer assets and collateral,
- c) Institute constant reconciliation between their customers' accounts at the general CCP member to whom they are affiliated and the records of the customer positions and collateral at their structure,
- c) Ensure that their customers are informed in an accurate and complete manner of the fact that the power of disposition on the collateral accounts of their customers opened with the general CCP member belongs to the relevant general CCP member and this power is restricted by Takasbank as to be limited only to the accounts at its structure and the collateral required to be held.
- d) Furnish all types of information and documents to be requested on issues deemed necessary by the relevant general CCP member, Takasbank and the Board related to their business and transactions falling under the scope of this Procedure, and provide all types of support in the investigations to be carried out by those commissioned by Takasbank and the Board.
- (3) If it is determined by the relevant general CCP member that any trading institution has failed to partially or fully fulfill the obligations referred to in the second paragraph of this article, this situation shall be notified immediately to Takasbank together with all information and documents substantiating non-fulfillment of such obligations, and all measures shall be taken to rectify these discrepancies thereof.
- (4) To ensure protection of the customers of the trading institutions; should the relevant trading institution be failed to fulfill its obligations despite all measures taken by the general CCP member, the positions and collateral of the customers of the trading institution, upon the relevant general

CCP member's request submitted to Takasbank, shall be transferred to the relevant general CCP member submitting the request in accordance with the agreement between each other. The trading institution shall provide the ownership information about the transferred customer positions and collateral to the transferee Member. Information about the transfer operation and the justifications of such transfer received from the relevant general CCP member shall be given by Takasbank to the Board and the relevant public authority within 1 business day.

(5) The provisions stipulated in other regulations related to the trading institutions shall be reserved.

Restricting member activities

ARTICLE 13 - (1) Activities of the Members under this Procedure may be restricted by Takasbank in the following situations.

- a) Removal from membership or suspension of activities for the markets or capital market instruments in which the clearing and settlement service is provided pursuant to article 13 of the Central Clearing and Settlement Regulation and/or article 14 of the Central Counterparty Regulation,
- b) Failure to fulfill the obligations stipulated in the Directive, the Procedure and the membership agreement,
- c) Identification of any unfavorable situation such as protest, garnishment, precautionary attachment, etc. about the Member, temporary or permanent suspension of its activities, cancellation of its relevant operating permit, prohibition of trading with the capital market instruments traded in the Market for any reason, decision rendered on its gradual liquidation or bankruptcy, or receipt of negative intelligence,
- c) Determination of the fact that the credit rating of the member is either diminished or does not exist as a result of the intelligence, financial analysis and/or rating studies periodically conducted by Takasbank.
- (2) In case of occurrence of any situation referred to in this article, Takasbank may resolve the outstanding positions of the Member to be liquidated either in part or in whole.
- (3) If the member's activities are restricted for reasons referred to in this article, this situation shall be informed to the Exchange, the Board and the relevant public authority.
- (4) Takasbank is authorized to take all types of measures it deems necessary, including those given below, for the completion of settlement transactions of the institution whose activities are suspended or who is removed from the membership.
- a) Restraining the member from trading directly on its accounts at Takasbank,
- b) Using the settlement receivables of the member to close its settlement debts,
- c) Resorting to the member's assets held in its free accounts at Takasbank.

Termination of membership

ARTICLE 14 - (1) The CCP membership may be terminated in the following situations by the

resolution of the Board of Directors;

- a) Determination by Takasbank of the fact that any one of the CCP membership conditions set forth in this Procedure and other relevant regulations is no longer met,
- b) Determination by Takasbank that risks of significant nature which would jeopardize the secure and uninterrupted functioning of the CCP system are arisen due to non-fulfillment of the obligations stipulated in this Procedure or other relevant arrangements,
- c) Failure of the CCP members whose activities have been restricted pursuant to the second paragraph of article 14 of the CCP Regulation to fulfill their relevant obligations within the maximum six months' period allotted by the sixth paragraph of the same article to them,
- ç) Upon the CCP member's own request.
- (2) Those wishing to terminate their CCP membership shall inform Takasbank of this situation in writing in accordance with the item (ç) of the first paragraph of this article. However; the relevant member who wishes to terminate its CCP membership must have been fulfilled its all obligations under the CCP Regulation and other relevant arrangements. In such cases, the Board of Directors may consent the termination of its CCP membership.
- (3) When terminating the membership of a CCP member, Takasbank shall obtain the opinion of the Exchange.
- (4) Takasbank is authorized to take all necessary measures including the transfer of positions of the relevant trading institutions and of their customers to another CCP member to ensure proper and uninterrupted functioning of the transactions of the trading institutions of whose settlement has been performed by those whose membership has been terminated.
- (5) Even in case of termination of the CCP membership, the obligations against Takasbank of such institution under this Procedure and other relevant arrangements and related to the transactions conducted until the date of Board of Directors' resolution for the termination of membership shall prevail.
- (6) The Board, other relevant public entities and institutions and the relevant market operator must be immediately informed of the member whose CCP membership has been terminated.

CHAPTERTHREE

Clearing & Settlement and CCP Service Principles

Takasbank's liability

- **ARTICLE 15** (1) Takasbank is the central counterparty with the open-offer method for the transactions executed in the Market and cleared and settled in the System. For these transactions, Takasbank undertakes the completion of clearing and settlement operations by acting as a buyer against the seller and as a seller against the buyer. Without prejudice to the limitations set forth in article 36 of the Central Counterparty Regulation, Takasbank assumes, in its capacity as the central counterparty, the clearing and settlement obligations arising from the transactions conducted in the Market by the Members in accordance with the principles and procedures stipulated in this Procedure and the legislation.
- (2) In the open-offer method, the liability of Takasbank against the parties to the transaction starts at the moment when the bid and ask orders are matched in the Market and ends with the completion of settlement. For the transactions being cancelled by the Exchange, the liability of Takasbank against the parties shall cease at the moment when the updates regarding the cancellation of the transactions are made by Takasbank. Should the limit allocated by Takasbank to the Member

on transaction basis in accordance with the fourth paragraph of article 5 of the Central Counterparty Regulation be exceeded, Takasbank shall not be liable for any loss that may arise from any transaction it has refrained from, provided that the provisions of article 33 of the Regulation are reserved.

- (3) For the transactions executed in the Market, Takasbank deals only with the Members. Takasbank shall not be liable for the obligations of the Members against their customers and of the general CCP members against the trading institutions.
- (4) Risks originating from the issuer shall fall outside the scope of the undertaking given as a CCP.
- (5) For covering the liquidity needs and any loss which would arise upon any default, the provisions of Chapter Five of the Central Counterparty Regulation shall be applied.

General principles of settlement and the marketplaces and platforms to which CCP service is provided

- **ARTICLE 16** (1) Except for the exemptions laid down by the Board, settlement of all transactions conducted in the marketplaces and platforms within the body of the Market shall be performed by Takasbank. The provision of article 17 of the Central Counterparty Regulation shall be reserved.
- (2) Settlement of foreign currency-denominated transactions executed in the marketplaces and platforms within the body of the Market shall be concluded by Takasbank by using the correspondent banks and/or the accounts at Takasbank.
- (3) Takasbank Board of Directors may decide, if it is also deemed appropriate by the Board, upon request or by obtaining the opinion of the Exchange, to provide only clearing and settlement service and not to provide CCP service or terminate the CCP service for some marketplaces or platforms to be recently established or already existing in the Market or for some securities to be recently issued or already being traded therein.
- (4) No Takasbank guarantee exists for the completion of settlement of the transactions related to the marketplaces/platforms and/or securities to which CCP service is not provided. Completion of settlement transactions within their time periods shall be conditional upon timely fulfillment by the obligor members of their obligations.
- (5) Collateral amount of which is calculated based on the methods determined by Takasbank shall be received from the members as to be used for any default that may arise due to the settlement transactions related to the securities to which CCP service is not provided in the Market. Collateral received for settlement shall be collected from the members in an effort not to get affected from the risk of any price change of such securities subject to default during the time period elapsed from the occurrence of an event of default to its resolution. The liability of Takasbank for any default related to the securities to which CCP service is not provided shall be limited to the collateral received for settlement.

Accounts to be used in fulfilling the obligations

ARTICLE 17 - (1) Settlement transactions are performed over Takasbank system.

- (2) The rights and obligations of the members arising from their transactions subject to settlement are concluded on account by using the accounts designated by Takasbank.
- (3) Obligations relating to the transactions conducted in the Market shall be fulfilled on the settlement date by using the relevant cash/ security settlement accounts.
- (4) For cash settlement transactions, the following accounts shall be opened at Takasbank in the name of the member;

- a) For cash payables; "Member Equities Settlement Debt Account No.22" or "Member Equities Gross Settlement Debt Account No.88".
- b) For cash receivables; "Member Current Account No.11".
- (5) For asset settlement transactions;
- a) TBTAH "Takasbank Settlement Pool Account" at CRA shall be opened.

Settlement date and period

ARTICLE 18 - (1) The settlement date of the transactions conducted in the Market is the second business day following the trade date (T+2).

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

Transaction Type	Start Time	End Time
Net Settlement Cash Debt Coverage	9:00	16:45 (16:45 included)
Net Settlement Asset Debt Coverage	9:00	16:45 (16:45 included)
Gross Settlement Cash Debt Coverage	9:00	16:45 (16:45 included)
Gross Settlement Asset Debt Coverage	9:00	16:45 (16:45 included)
Bilateral Transfer (BISTECH)	9:00	17:05
Bilateral Transfer (Takasbank)	9:00	17:00

- (3) No settlement transaction is executed on half-days. The settlement of any transaction whose settlement date falls on a half-day shall be performed on the next full business day. The settlement of transactions conducted in the Market on a half-day shall be pooled with the transactions of the previous day and performed collectively on the second business day following the half-day.
- (4) It is not possible for the parties to finalize the settlement transactions by fulfilling their security or cash obligations before the settlement date.
- (5) The settlement deadlines of the Market shall be designated by Takasbank Board of Directors by obtaining the opinion of the Exchange.
- (6) The settlement period can be temporarily changed by the General Manager due to the problems arising from the clearing and settlement, custody, payment or market operating systems.
- (7) Completion of settlement transactions of the securities to which CCP service is not provided within their time periods shall be conditional upon timely fulfillment by the obligor members of their obligations. No Takasbank guarantee exists for the completion of transactions on the settlement date and in due time

Currency

- **ARTICLE 19** (1) In the payment of cash obligations arising from the clearing and settlement transactions, the currency in which the transactions are conducted shall be used.
- (2) If and to the extent it is included in the market arrangements, the settlement of the transactions conducted in a currency different than Turkish Lira can be performed over the relevant currency but it can also be performed by converting it to Turkish Lira over the CBRT foreign currency selling rate announced on the settlement date.

Finality of settlement transactions

- **ARTICLE 20** (1) The settlement instructions and transactions and the payment transactions arising from the transactions conducted in the Market can neither be revoked nor can be cancelled including the state of temporary or permanent suspension of the member activities and initiation of liquidation actions before the administrative and judicial authorities.
- (2) Upon any notification served for the member to Takasbank regarding all types of measures and decisions regulated by the laws which inhibit the member from making any disposition on the funds or capital market instruments in a manner to include temporary or permanent suspension of transfer of funds or capital market instruments and imposing any restriction thereon;
 - a) For transactions of the Member conducted in Borsa Istanbul Inc. Equity Market;
 - if the member activities are suspended or any factor which would impede the continuation of its activities is identified, the Exchange shall be informed thereof via the fastest means of communication to stop its Exchange transactions,
 - ii— All trades executed in the Market and transmitted to the clearing and settlement system shall be deemed finalized and are included in netting, and the clearing and settlement transactions of the payables and receivables occurred as a result of netting are concluded. However, trade cancellations are exempt therefrom, whereby the trade amendments and position transfers are included in the clearing and settlement process with their new form.
 - iii Collateral established by the member by its available cash and security balances at Takasbank shall be used to terminate its obligations.

Finality of transfer transactions

- **ARTICLE 21** (l) Transfer orders transmitted through the screens provided by Takasbank, via the web service interface, SWIFT system and by a written instruction shall be deemed entered into the system at the moment of their receipt by Takasbank. These orders can be revoked by the member until their execution.
- (2) Upon entry of the transfer order into the system, the transaction cannot be withdrawn by the members and shall be deemed finalized from the moment at which the amount and/or unit exchange has been executed in the relevant accounts opened at Takasbank system in the name of the member placing the transfer order and of the member being counterparty to that transfer order.

Netting

- **ARTICLE 22** (1) In calculation the net payable or receivable amount for the transactions executed in the Market, employing multilateral netting method on security level by observing customer/portfolio break-down is essential. At the end of netting, the settlement instructions are created against each security in a manner to include the cash receivable/payable information. The obligations of the members are on the basis of settlement instructions being created. Daily netting is applied. Except for the event of default, obligations and receivables are not netted off between the days. The third paragraph of article of 18 of the Procedure shall be reserved.
- (2) The Board or the Exchange may resolve fulfillment of the settlement transactions without

performing any netting operation; enforcement of gross settlement on market, marketplace, trading platform, security or investor basis; the market maker and/or liquidity provider members to be kept exempt from the gross settlement process; the settlement of block buy/sell transactions, special transaction notifications and some other specific transactions to be excluded from netting; the netting to be performed only for the transactions between two members; or the transactions in specific nature to be omitted from netting.

Delivery versus payment principle

- **ARTICLE 23** (1) In the clearing and settlement transactions, the delivery versus payment principle shall be applied. The settlement receivables of the members failing to fulfill their settlement obligations on the settlement date shall not be paid.
- (2) The receivables may also be paid partially against the partially fulfilled obligations on the settlement date.

Order of liquidity

- **ARTICLE 24** (1) The settlement operations of the assets can be performed by dividing them into two groups as being liquid and illiquid.
- (2) Takasbank can use the cash amounts deposited by the members to perform only the settlement operations of the illiquid assets until a time it will designate.

Rectify transactions conducted in the Market

- **ARTICLE 25** (1) Rectify operations of the transactions conducted in the Market are performed in Takasbank system.
- (2) All realized and active-status trades relating to the order sent to the Exchange can be corrected in a collective manner. For the dated orders, transactions that have been realized on the transmission date of the order and the next business day can be subject to correction. If there are more than one transaction realized from the same order, all transactions must be changed. In order for such correction operations to be performed, there must be no pending portion of the relevant order in the order books.
- (3) It is possible to rectify on the trading account and customer account number areas in the order, and the customer category is updated automatically based on the account type. However, no rectify can be made on other areas.
- (4) Rectify operations can be performed from the realization moment of the transaction to T+1 day session closing time of the Exchange. Changes can be made by Takasbank on the hours designated for the transaction corrections.

Position transfers between the members

ARTICLE 26 - (1) It is possible for a member to transfer its positions in an order to another member.

- (2) Position transfers can be performed in 2 ways as to be direct and position-based transfers.
 - i. Direct transfer; It can be between a Market-member institution not being a clearing and settlement member and a general clearing and settlement member, but can also be between certain trading accounts of a direct clearing and settlement member and a general clearing and settlement member. The said transactions are conducted in accordance with the agreement made between the members and informed to the Bank, by way of automatically transferring the positions of the realized transactions of the institutions transmitting the order to the position accounts under the relevant general clearing and settlement members, and the settlement transactions are performed over the final accounts to which they were transferred.

- ii. Position-based transfer; It is the transfer of realized transactions of a transmitted order to any clearing and settlement member on an individual basis. The settlement transactions are performed over the transferee member accounts.
- (3) Position transfers can be made from the realization moment of the transaction to T+1 day session closing time of the Exchange. Changes can be made by Takasbank on the hours designated for the position transfers. For the dated orders, transactions that have been realized on the transmission date of the order and the next business day can be subject to position transfers.
- (4) Position-based position transfer is possible by the acceptance of the transferred position by the other member, and the non-accepted positions shall be deemed to have not been transferred.

Pre-Trade Depo Requirement

- **ARTICLE 27** (1) The CMB and the Exchange may resolve, with the aim of preventing any misappropriation of information and the Market fraud, to impose a condition (pre-depo requirement) on the investors and/or on a capital market instrument basis, when a buy or sell order is placed in relation to the natural or legal persons and the officers of the legal persons and the relevant capital market instruments; to make available the cash or capital market instrument related to transaction subject to the order in the accounts at the investment institution to which the investor placed its order or deliver it in advance to the investment institution at the moment the order is placed and keep such cash or capital market instrument in these accounts until the settlement obligation is fulfilled.
- (2) The pre-depo requirement application must be exercised by the order-placing investment institution due to the fact that no cash accounts are kept on customer basis at Takasbank and the asset settlement obligations are fulfilled over the balances in the customer accounts at the CRA. Takasbank cannot be held liable for the obligations arising due to failure of the member to make the depo requirement control.

Market settlement transactions

ARTICLE 28 - (1) Settlement of the trading transactions conducted in the Market is performed on the settlement date by using the relevant cash/security settlement accounts.

- (2) The customer-based settlement positions are generated by also observing the customer/portfolio segregation when the trading transactions conducted by the members in the Exchange are matched.
- (3) Settlement positions can be monitored instantly by the members. Transactions transferred by the position transfer are also reflected in the positions.
- (4) Settlement instructions are created at the end of T+1 day against each security as per the settlement positions in a manner to also include the cash receivable/payable information. The instructions can be monitored by the members as of the beginning of T+2 day. The obligations of the members are on the basis of settlement instructions being created.
- (5) The rights and obligations of the members arising from their transactions subject to settlement are concluded on account by using the relevant cash or securities accounts designated by Takasbank. Obligations are fulfilled by the members having any securities debt by using Takasbank settlement accounts at the CRA and by the members having any cash debt by using the cash settlement accounts at Takasbank.
- (6) Settlement is concluded in intervals set by Takasbank collectively in a manner to make settlement of the highest number of entries. It is also possible to fulfill the settlement obligations in a partial manner, and partial settlement can be made in the time periods designated by Takasbank against the partially fulfilled obligations. Distribution of settlement receivables is performed by taking the status of settlement pool balances in the distribution queue and the remaining obligations

of the members into consideration.

(7) The Exchange shall report to Takasbank the transactions conducted in the Market but whose settlement is decided to be made outside Takasbank.

Net cash settlement

- **ARTICLE 29** (1) Net cash settlement obligations are deposited by the members during the hours specified in this Procedure to the "Member Equities Settlement Debt Account No.22" opened on a member basis at Takasbank.
- (2) Cash settlement receivables are released by way of being transferred to the relevant account at the CRA following the reconciliation made by the system of the fulfilled securities obligations.
- (3) The released cash receivables of the entries whose settlement were concluded against the partially fulfilled obligations may also be paid in a partial manner. Distribution of settlement receivables is performed by taking the status of settlement pool balances in the distribution queue and the remaining obligations of the members into consideration.
- (4) Cash receivables are credited to the members' "Member Current Account No.11" at Takasbank.
- (5) In addition to their net cash settlement debts occurred at the beginning of the day, the members are also responsible for the cash debts of their settlement instructions whose reconciliation have not yet been made at the end of the day.

Net securities settlement

- **ARTICLE 30** (1) Net securities obligations are fulfilled by the members on the settlement date during the hours specified in this Procedure.
- (2) Securities settlement is concluded by the reconciliation made by the system after the transfer from the member pool accounts at the CRA to Takasbank Settlement Pool Account.
- (3) In order for the securities settlement receivables to be paid, the cash obligations should have been fulfilled in accordance with the delivery versus payment principle and the relevant reconciliation should have been made by the system.
- (4) The released securities receivables of the entries whose settlement were concluded against the partially fulfilled obligations may also be paid in a partial manner. Distribution of settlement receivables is performed by taking the status of settlement pool balances in the distribution queue and the remaining obligations of the members into consideration.
- (5) Securities settlement receivables are transferred to the members' relevant accounts at the CRA.

Gross settlement

- **ARTICLE 31** (1) If the Board, the Exchange or the market operator resolves the fulfillment of settlement obligations without performing any netting operation, enforcement of gross settlement on market, marketplace, platform, security or investor basis, the settlement of blockage sell and special order transactions to be excluded from netting, the netting to be performed only for the transactions between two members or the transactions in specific nature to be omitted from netting, then the relevant transactions shall be separated and not be included in netting/gross settlement.
- (2) The member shall become a securities obligor up to the sum of sell transactions it has conducted in the market and a cash beneficiary up to the sum of its corresponding cash amount; and

become a cash obligor up to the sum of buy transactions and a securities beneficiary up to the total number of corresponding securities. Debit/credit records are created by observing the customer and portfolio segregation.

- (3) Gross settlement securities and cash obligations are fulfilled by the members on the settlement date during the hours specified in this Procedure.
- (4) Gross cash settlement obligations are deposited by the members during the hours specified in this Procedure to the "Equities Gross Settlement Account No.88" opened on a member basis at Takasbank.
- (5) Securities settlement debts are closed by way of transfer from the member pool account at the CRA to Takasbank Settlement Pool Account.
- (6) Gross settlement cash receivables are credited to the members' "Member Current Account No.11" at Takasbank.
- (7) Securities settlement receivables are transferred to the members' relevant accounts at the CRA.
- (8) Securities and cash receivables subject to gross settlement are distributed after the settlement cutoff time.

Offsetting transactions between the markets

- **ARTICLE 32** (1) It is possible to offset receivables from a market/marketplace against the payables arising from other market/marketplace transactions by giving a cash and/or securities offsetting instruction between the markets operated by Takasbank and the markets/marketplaces to which settlement service is provided.
- (2) Markets/marketplaces in which an offsetting transaction can be given shall be determined by Takasbank and announced to the members.
- (3) Cash offsetting instructions shall be valid until EFT closing time of the day on which the instruction is given, and the instructions failed to be realized until EFT closing time shall become null.
- (4) Should the receivable be failed to be received within the same day despite the given offsetting instruction, the obligor member shall be obliged to pay its debt to the market/marketplace to which it is indebted.
- (5) Cash offsetting instructions must be delivered electronically to Takasbank at the latest until;
 - a) 14:30 on the business days between Debt Instruments Market / Equity Market / Equity Repo Market / Borsa Istanbul Money Market,
 - b) 15:45 on the business days between Takasbank Money Market and other markets/marketplaces.

Collective investment undertakings bilateral and settlement transactions

ARTICLE 33 - (1) For the securities sell transactions conducted in the market by the intermediary institutions on behalf of the collective intermediary undertakings; a bilateral instruction shall automatically be generated by the system up to the total sell amounts on the basis of each institution intermediating to the sell.

CHAPTER FOUR

Account Operations

Account structure

- **ARTICLE 34** (1) All members intending to trade in the Market are obliged to open their cash and securities accounts necessary for the execution of settlement transactions at Takasbank, CRA and, if the nature of transaction necessitates, at the correspondent bank to be designated by Takasbank.
- (2) Trading, position and collateral accounts shall be opened at Takasbank to be able to monitor trades, positions and collateral.
- (3) Trading Account is an account where the orders matched in the Market are monitored on a transaction basis.
- (4) The position accounts include the net amounts and net numbers calculated upon netting of the transactions. Risk management is performed over the position accounts.
- (5) Collateral accounts where the collateral related to the positions of the members' own portfolios or of their customers are monitored shall be opened at Takasbank. No customer/portfolio segregation shall be made for the collateral accounts where the securities are monitored and/or the markets/marketplaces to which the CCP service is not provided in accordance with the permission of the Board.

Account types

- **ARTICLE 35** (1) The position and collateral accounts associated with the trading accounts can be opened at Takasbank in two different types as to be "Customer" and "Portfolio". Portfolio account is an account in which the transactions made by the member for its own portfolio is monitored. Monitoring customer positions in the multiple position accounts in a collective manner is essential. No customer and/or portfolio segregation shall be made for the accounts where the securities are monitored and/or the markets/marketplaces to which the CCP service is not provided in accordance with the permission of the Board.
- (2) For the trading institutions, single portfolio and multiple customer portfolio accounts that are linked to the general CCP member but separate from other customer and trading institution accounts of the general CCP member shall be opened.
- (3) If requested by the CCP member, the customer positions and collateral in the Equity Market must be monitored in the collateral sub-accounts of the customers and the single position accounts linked to the member and opened at Takasbank. Details about the segregated single trading accounts are given below.
- a) For the investors on whose name a segregated single trading account is to be opened; the monthly average of total trading volume conducted over all accounts of the relevant investor must be at and above 2 billion Turkish Lira in the 6 months' period before the application date. This criterion is controlled by Takasbank at the end of June and December and the single trading accounts failing to meet this condition are turned inactive. That is; the segregated single trading accounts opened during the semi-annual review period shall be initially made subject to reviewing at the end of the subsequent 6 months' period.
- b) Trades executed from the joint accounts shall also be included in the calculation of total trading volume requirement stipulated in the item (a) of the third paragraph of this article.
- c) For the investors wishing to make use of segregated single trading account service, applications must be made in an individual manner on the basis of each investment institution of which they are a customer.
- c) The said application referred to in the item (a) of the third paragraph of this article shall be made with a cover letter signed by the people authorized to represent and bind the investment

institution and containing the registry information of the investment institution, the numbers of all active accounts under the investment institution including the joint accounts, for which account numbers out of those the segregated single trading account application is made, the opening date in the investment institution of these accounts for which the application is made and the estimated date on which the segregated single trading accounts are started to be used. A copy of the agreement made between the investor and the investment institution for such service shall also be enclosed to this application letter.

- d) If the investor account numbers referred to in the item (d) of the third paragraph of this article are at and above 14 digits, then new account(s) comprising of maximum 13 digits must be opened for such investors at the investment institution and the application must be made for these new accounts.
- e) If an investor holds more than one account at the applicant investment institution and the segregated single trading account application is made for just one or a few of them, the settlement transactions executed from the accounts for which no application was made and the collateral management shall be continued to be performed from the multiple customer accounts of such intermediary institution and the relevant collateral accounts.
- f) Trades executed from the segregated single trading accounts shall be again netted off in the new settlement position accounts to be opened for these investors, in a singular manner without being made subject to multiple netting and they shall be included in the settlement process with separate settlement instructions. In the same vein, new collateral accounts shall be created for these new settlement positions and the investment institution shall perform its collateral restoration transactions resulting from trades executed from the single trading accounts over these new collateral accounts.
- g) Applications made for the segregated single trading accounts shall be concluded within 1 month at Takasbank. The time period elapsing due to request of additional information and documents shall not be taken into consideration in the calculation of 1 month' period. The result of application shall be informed to the member with a letter and the date on which the single trading account is to be opened shall also be included in the letter.
- ğ) For opening the segregated single trading accounts, the fee principles proposed by Takasbank and deemed appropriate by the Board shall be announced separately to the members.
- (2) The members shall monitor the positions and collateral of their own portfolio and the customer positions and collateral in a separate manner in the accounts to be opened at Takasbank. Collateral deposited by the members to the collateral accounts associated with the multiple position accounts by Takasbank shall be deemed to belong the Member.

Opening of the accounts

ARTICLE 36 - (1) Accounts in which the transactions will be conducted should have been defined in Takasbank system

- (2) For the trading institutions, opening an account at the general CCP member is a must.
- (3) No single account for the customers of trading institutions can be opened.

Segregation

ARTICLE 37 - (1) In the Market, the customer transactions, positions and collateral are monitored in the multiple or single transaction and position accounts opened for the Member and in the collateral accounts associated with these accounts, separately from the member's own transactions, positions and collateral.

(2) Transactions, positions and collateral of the proprietary portfolio of the member are monitored in the single transaction and position accounts to be exclusively opened for the members and in the collateral account associated with these accounts.

Account migration

- **ARTICLE 38** (1) The positions monitored in the multiple or single position accounts and the collateral associated with these positions can be migrated by Takasbank between the CCP members upon instruction of the transferee and transferor CCP members, if deemed appropriate by Takasbank. In such a case, the transferor CCP member shall obtain the written consent of its customers of whose positions and collateral are to be transferred.
- (2) To be able to port the multiple positions accounts, the instruction of all customers who hold positions in these accounts is required. Collateral associated with the multiple position accounts for which migrating instructions are given by the customers shall be ported by the instruction of the member.
- (3) Takasbank's right to refuse the account porting requests with respect to the soundness of clearing and settlement transactions and the security of settlement shall be reserved.
- (4) If the positions monitored in the accounts of any member whose membership activities have been restricted or whose membership has been terminated due to default or for other reasons are transferred together with the collateral associated with these positions to another member, then the porting transactions shall be conducted by Takasbank;
 - a) If any pre-designation regarding the transferee member has been made in the agreement signed between Takasbank and transferor member; in accordance with the provisions of the agreement,
 - b) If no pre-designation regarding the transferee member has been made in the agreement signed between Takasbank and transferor member but the transferor member makes an agreement with the transferee member until the date on which the migration will be made; in accordance with the provisions of that agreement,
 - c) If no designation has been made in line with the provisions of the item (a) and (b) of this paragraph but Takasbank achieves to find a transferee member.
- (5) Should the account migration be made, collateral available in the accounts to which the transfer was made cannot be withdrawn until the reconciliation is achieved between the records of Takasbank and those held at the member whose activities have been restricted or whose membership has been terminated. Provisions regarding any proceeding pursued by administrative and judicial authorities shall be reserved.
- (6) Should the member's Market activities be restricted or its membership be terminated, the collateral amount that can be migrated from or returned to the linked customer accounts shall be limited to the collateral amount remaining after the variation margin amounts that have arisen following the default is reflected in the accounts.
- (7) Accounts failed to be migrated due to unable to find a member who can take over the positions and collateral, or unavailability of sufficient time to do so, or any collateral deficiency, or those having collateral deficiency after the liquidation of positions may be made subject to liquidation in accordance with the principles of Chapter Five of the Central Counterparty Regulation. The collateral balance to be occurred after the liquidation of positions in the accounts failed to be migrated due to unable to find a transferee member shall be returned pursuant to article 27 of the Central Counterparty Regulation.
- (8) Regarding the accounts linked to a member whose membership activities have been restricted or whose membership has been terminated due to default or for other reasons; if such accounts are

related to the Markets/marketplaces to which CCP service is not be provided in accordance with the Board permission or the securities held in the accounts are those of the securities that are permitted not to be given CCP service by the Board, then Takasbank may not provide migration service for the positions related to such marketplaces/platforms/securities.

CHAPTERFIVE

Risk Management and Margining Principles

Risk management

- **ARTICLE 39** (1) The risk management in the Market is performed by Takasbank. The risk management conducted in the market includes the risk and collateral calculations made at time periods announced by Takasbank by using the position and collateral balances available at the respective moment and the current prices thereof.
- (2) The "required margin" is calculated in accordance with the principles stipulated in the section with heading "Collateralization Method" of this Procedure by using the portfolio-based collateralization method for each account. Results of the calculation being made are reflected in BISTECH settlement screens.
- (3) At the Market, at-trade and post-trade risk management methods are applied. The risk limit controls stipulated in article 40 of this Procedure and the margin calls are carried out by taking the calculations made in the post-trade risk management layer as the base.
- (4) The clearing positions and collaterals included in the accounts opened by the members at Takasbank shall be subject to the valuation process by Takasbank at the latest at the end of each working day.
- (5) Margin call is triggered for accounts having collateral value less than required margin. Margin calls are made through member screens and / or reports provided by the Takasbank. In case that the margin call is sent through the application, it is accepted that the member receives the call without any need for notice and notification. The responsibility of the member starts at the time when the margin call by Takasbank reaches the member.
- (6) Members subject to margin call could cover margin call by depositing collateral and/or offsetting risk bearing positions. The amount covered against margin call is the difference between the margin requirement at the end of the previous working day and that of minimum amount at intraday risk calculation batches collateral deposits, withdrawals, valuations, account updates and fulfillment of obligations are carried out on a position account basis.
- (7) In calculating the collateral amount received for settlement in relation to the marketplaces/platforms to which CCP is not to be provided in accordance with the Board permission, the method and parameters applied to the marketplaces/platforms to which CCP service is provided shall be used.

Risk limits

- **ARTICLE 40** (1) Takasbank defines risk limits to the Members to which it provides CCP service, based on their financial capability. Risk limits are determined over the collateral amounts required to be held due to the positions carried by the Members in the markets to which CCP service is provided.
- (2) Risk limits are designated separately for each Market to which CCP service is provided and the limit monitoring in BISTECH system is carried out over the total designated amount.

- (3) Whether or not the member's collateral required to be held in total due to all positions it has taken for itself and its customers in all markets to which CCP service is provided exceeds its risk limit is checked at intra-day risk calculation times.
- (4) When the member exceeds its risk limit, the exceeding portion is multiplied gradually by the haircuts set forth in the sixth paragraph of this article and the total amount obtained is reflected in the Member's "additional trade margin" account where its obligations arising from the overruns relating to the Member's risk limit are monitored. A margin call is issued via the member screens and/or through reporting to the member having collateral deficit in its additional trade margin account. If the additional trade margin obligation is failed to be fulfilled at 15:00 on the business day following the margin call, the default provisions shall be applied.
- (5) If the limits exceed 300%, then the order transmission of the member shall be blocked regardless of whether its collateral balances are sufficient or not. All outstanding passive orders of the accounts whose order transmission was blocked shall be cancelled automatically in BISTECH operating system. When the rate of the required margin amount subject to the risk limit calculation to the risk limit defined to the member falls below 300%, the order transmission shall again be permitted.
- (6) The rate of total required margin available in all accounts of a member to its risk limit and the haircuts corresponding to these rates are given below. The total additional collateral amount to be requested as a result of the limit overrun shall be found by multiplying the amounts falling into each bracket by the haircuts exclusively set for that bracket.

Initial Margin / Risk Limit Rate	Haircut
100% < rate < 130%	0,2
131% < rate < 150%	0,3
151% < rate	1,0

(7) Assets that will be accepted as collateral for the extra margin account and group limits to be applied to these assets are given below. Collaterals must be pledged from the assets that the proprietor belongs to the member or member has the right to save on it.

Collateral Type	Group Limit
Turkish Lira	Max %100
Convertible Foreign Currency (USD/EURGBP)	Max %100
Government Domestic Debt Securities	Max %100
Lease certificates issued by the Republic of Turkey Undersecretariat of Treasury, Asset Leasing Company	Max %100
Share Certificates (BIST100)	Max %100
Mortgage-backed securities, mortgage- based securities, asset-backed securities and asset-based securities	Max %100
Equity Umbrella Fund Shares	Max %100
Debt Instruments Umbrella Fund Shares	Max %100
Exchange traded gold	Max %100

CHAPTERSIX

Principles Regarding Collateral

Membership collateral

ARTICLE 41- (1) The general CCP members and the direct CCP members shall deposit 10.000-TRY and 5.000-TRY membership collateral respectively to cover the losses that may be incurred as a result of the failure to fulfill against Takasbank their dues, fees, commissions and similar obligations within the time period allotted to them. The said amounts may be re-determined by the Board of Directors by obtaining the approval of the Board. The membership collateral shall be deposited in Turkish Lira.

- (2) If the Members fail to fulfill their obligations under the first paragraph, Takasbank shall collect the relevant amount from the membership collateral. After such collection, the Member shall restore the membership collateral to the amounts stipulated in the first paragraph within 3 business days. Should the deficit amount be failed to be restored, the relevant amount shall be collected ex officio from the member.
- (3) In case of termination of the membership, the membership collateral shall be returned provided that all obligations of the member against Takasbank have been completely fulfilled.

Initial and variation margins

- **ARTICLE 42** (1) Initial and variation margins shall be requested from the members to cover the risks arising from the securities positions in the Equity Market to which CCP service provided. The initial margin shall be received at the beginning to cover, in the event the member falls into default, any interest change that may occur in the Market during the time period elapsed from the moment in which the default occurs to its resolution. On the other hand, the variation margin shall be requested for the difference between the current values of the positions and their market prices.
- (2) In determining the statistical parameters constituting the basis of the initial margin, the confidence level shall be applied as 99.50% and the holding period shall be taken into account for the recently conducted transactions as 2 days; the holding period for the transactions conducted before the trade date on which the calculation was made shall be scaled based on the number of days remaining to the settlement. In determining the parameters subject to the margin calculations of the positions to be settled on the same day, 1-day holding period shall be used. The designated parameters shall be announced via a general letter, published on Takasbank's website and reviewed monthly by considering the market conditions. If it is deemed necessary, Takasbank shall revise the risk parameters in accordance with the market conditions without waiting for the one months' period to expire.

Collateralization method

- **ARTICLE 43** (1) For the portfolio-based collateralization transactions, Takasbank uses BISTECH Margin Management which takes portfolio-based risk management algorithm as the base.
- (2) The member must cover its collateral obligation arising from its own portfolio with collateral belonging to it and its collateral obligation arising from multiple customer position accounts with collateral belonging to it or on which it has the power of disposition and its collateral obligation arising from the trading institution portfolio or customer positions with collateral belonging to it or those received from and belonging to the trading institution or on which the trading institution has the right of disposition. Collateral deposited by the members to the collateral accounts associated with the multiple position accounts by Takasbank shall be deemed to belong the Member.

- (3) Positions regarding the marketplaces/platforms and/or securities to which CCP service will not to be provided in accordance with the Board permission shall be monitored in an individual account of the member separately from the positions to which CCP service is provided, and the collateral amount received for settlement shall be calculated over the netted positions in this account. In the valuation of collateral received for settlement, the parameters and assets determined in relation to the marketplaces/platforms and/or securities to which CCP service is provided shall be used.
- (4) BISTECH Margin Management classifies the contracts included in the same commodity group and analyses them. Takasbank calculates the initial margin with the following steps by using BISTECH Margin Management.

- 1st Step : Commodity Group Risk Analysis

- 2nd Step : Intra Commodity Groups Risk Analysis

- 3rd Step : Netting impact analysis

- 4th Step : Initial and Variation Margin Calculation

- 5th Step : Required Margin Calculation

Commodity group risk analysis

ARTICLE 44 - (1) BISTECH Margin Management performs the risk analysis on the basis of commodity groups. The risk of each commodity group is calculated independently from other commodity groups. The risk of a commodity group risk is comprised of the sum of scan risk and intra-commodity spread charge being defined as the commodity group internal risk.

- (2) Scan Risk is a type of risk determined as a result of the Risk Arrays calculation made by the portfolio-based risk management algorithm by applying the relevant scenarios to the "Price Scan Range (PSR)" values for each contract. Price Scan Range refers to the maximum price change that may occur for the underlying asset/commodity group.
- (3) A risk array calculated for each commodity group is a value demonstrating the theoretical profit/loss figure that may occur for the commodity group according to the different price scenarios of the underlying asset of the contracts included in the commodity group. The risk arrays are calculated by using 16 standard scenarios given in the following table. The last two of them, corresponding to the 15th and 16th scenarios, represent the extreme moves that may occur in the price of underlying asset. To prevent the extreme scenarios from overriding other scenarios, the obtained profit/loss figure is multiplied by a covered fraction.

Scenario	Price Scan Range (Price Move by Per.)	Scenario	Price Scan Range (Price Move by Per.)
1	PSR Constant	2	PSR Upwards
3	PSR 1/3 Upwards	4	PSR 1/3 Upwards
S	PSR 1/3 Downwards	6	PSR 1/3 Downwards
7	PSR 2/3 Upwards	8	PSR 2/3 Upwards
9	PSR 2/3 Downwards	10	PSR 2/3 Downwards
11	PSR 3/3 Upwards	12	PSR 3/3 Upwards
13	PSR 3/3 Downwards	14	PSR 3/3 Downwards
15	Extreme Move Scenario: PSR 200% Upwards	16	Extreme Move Scenario: PSR 200% Downwards

(2) Intra-Commodity Spread Charge margin may be calculated for the collateralization of the basis risk between the different settlement dates of the shares in the same commodity group. In case when the intra-commodity spread charge is to be collaterilized, Takasbank shall announce the relevant parameters through a general letter together with other parameters and publish them on its website. The calculated intra-commodity spread charge shall be added to the total margin requirement.

Intra-Commodity Spread Charge Margin =

Min. (Total Number of Buys, Total Number of Sales)* Intra-Commodity Spread Charge Parameter

Inter-commodity risk analysis

ARTICLE 45 - (1) Once the risk of each commodity group is calculated for a portfolio, the margin is calculated by taking account of the impact of correlations between the price movements of the commodity groups on the portfolio risk. If, after the commodity groups are netted-off internally, there are reverse transactions (buy/sell) between the commodity groups, the correlation impact shall be calculated and deducted from the total margin requirement. For an account including the positions of 2 commodity groups, the inter-commodity spread credit is calculated as given below.

```
Number of Shares Subject to Correlation Impact (NSSCI) =
Min. (Group 1 Total Number, Group 2 Total Number)
Risk Mitigating Effect for Group 1 (1—>2) =
Scan Risk Group 1 * NSSCI/(Group 1 Number of Total Positions)
Risk Mitigating Effect for Group 2 (2—>1)
= Scan Risk Group 2 * NSSCI/(Group 2 Number of Total Positions)
Total Correlation Impact =
Risk Mitigating Effect for Group + Risk Mitigating Effect for Group 2
```

Netting impact analysis

ARTICLE 46 - (1) In the Equity Market BISTECH Margin Management, the netting impact of the shares included in the same commodity group can be limited. This limitation is calculated by multiplying the difference between the amount (gross) to be obtained as a result of the collateralization of all positions in an account without being netted-off and the amount (net) to be obtained by netting them off by the netting parameter set by Takasbank between 0 and 1. In case when the netting impact is to be analyzed, Takasbank shall announce the relevant parameters through a general letter together with other parameters and publish them on its website.

```
Netting Impact =
```

[Scan Risk (gross) – Scan Risk (net)] *(1 - Netting Parameter)

Calculating the initial margin

ARTICLE 47 - (1) Initial Margin is found by adding the intra-commodity spread charge margin and the netting impact amount to the scan risk value and deducting from the calculated total amount the value calculated by observing the correlation impact between the commodity groups.

```
Initial Margin =
```

Scan Risk + Intra-Commodity Spread Charge Margin - Inter-Commodity Spread Margin + Netting Impact

Calculating the variation margin and total margin requirement

ARTICLE 48 - (1) In the Equity Market BISTECH Margin Management, the risk calculation is made by using the current (market) price of the share. The difference between the amount of taken positions valued by current prices and the amount valued by their settlement prices (strike price) constitutes the variation margin. Variation margin can increase or decrease the total margin requirement.

*Variation Margin = Number of Positions * (Current Price – Settlement Price)*

(2) Total margin requirement is equal to the sum of initial margin and variation margin.

Margin Requirement = Initial Margin + Variation Margin

Intra-day margin call

ARTICLE 49 - (1) If the rate of total required margin amount for an account during the day to the total appreciated collateral of that account or the cash collateral deficit exceeds the criteria determined by Takasbank, an intra-day margin call may be issued by Takasbank to ensure restoration of such overruns.

- (2) The obligations subject to the margin call must be deposited to the relevant account within two hours. Default provisions shall be applied for the obligations failed to be fulfilled during that time period.
- (3) Criteria for the intra-day margin call shall be determined by Takasbank by considering issues such as the market conditions, margin concentration, whether the margin call is initial margin or variation margin-originated or not and nominal/proportional deficit amounts of the account, etc.

End-of-day margin call

ARTICLE 50 - (1) For those accounts that fall below the margin requirement or for which there is collateral deficiency in Turkish Lira ratio, margin call is triggered at the end of each working day.

- (2) Margin call amount shall be notified to the Members through the application terminals. In case that the margin call is sent through the application, it is accepted that the member receives the call without any need for notice and notification. The responsibility of the member starts at the time when margin call by Takasbank reaches the member.
- (3) Members are obliged to fulfill their margin call requirement by 15:00 no later than the next business day. Default provisions shall apply for non-performing obligations during this period. The last hour to cover margin call is 11:00 in half working days.
- (4) Accounts that are subject to margin call or in default could exit from their status by settlement of their positions, depositing collateral and / or reducing margin requirement amount. Margin call related to deficiency in Turkish Lira concentration limit must be covered in cash.
- (5) During the workday following the margin call, accounts having collateral more than margin requirement are no longer subject to margin call or default. In addition, in the event that the total amount of collateral deposited exceeds the margin requirement calculated at previous day

end as a result of revaluation by using the prices related to the previous day end the when margin call is calculated and triggered, the margin call or default is deemed to be closed even if the collateral is insufficient at all risk calculation during the day.

Assets eligible as collateral and guarantee funds

ARTICLE 51 - (1) The following assets can be used by the Members for the fulfillment of their margin obligations. Takasbank Board of Directors is authorized to also accept other assets specified in article 19 of the Central Counterparty Regulation as collateral and guarantee fund contribution amount.

- a) Cash Turkish Lira
- b) Convertible Foreign Currency, (USD, EUR, GBP)
- c) Government Domestic Debt Securities,
- ç) Republic of Turkey Undersecretariat of Treasury Foreign Debt Securities (Eurobond),
- c) Lease certificates issued by the Republic of Turkey Undersecretariat of Treasury, Asset Leasing Company,
- e) Share certificates included in BIST100 index,
- f) Equity Umbrella Fund Shares,
- g) Debt Instruments Umbrella Fund Shares.
- h) Exchange traded gold
- i) Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities
- (2) The share of the sum of securities eligible as collateral and the guarantees accepted by Takasbank which have been issued or given by any issuer or bank or by other issuers and banks belonging to the same capital group with that issuer or bank (except for the securities issued by the Undersecretariat of Treasury and the guarantee and securities of other banks whose majority of capital belongs to the Undersecretariat of Treasury) in the collateral accepted by Takasbank for this market cannot exceed 25%. For the collateral exceeding 25% limit in the conducted periodic controls, the order of priority shall be taken into account; and the owner members of the lastly deposited collateral leading to the limit overrun shall be notified via electronic mail and asked to replace the collateral.
- (3) The guarantees of the banks and companies owned by the members and/or affiliated to the capital group to which they belong and the securities issued by them (except for the securities issued by the Undersecretariat of Treasury and the guarantee and securities of other banks whose majority of capital belongs to the Undersecretariat of Treasury) cannot be given by the member as collateral to Takasbank.
- (4) Cash amounts generated as a result of the equity positions shall be transferred to the member's cash collateral account denominated in Turkish Lira. By considering that the share value of the equity position may change for the equity-denomiadeted collateral, preservation of the collateral level shall be under the responsibility of the Member.
- (5) 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.
- (6) 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.

(7) Out of the assets accepted as collateral, those defined to BISTECH system are monitored through the Applicable Collateral Report included within the integration scope. Should the assets not included in this report be intended to be given as collateral, a notification must be made at least one business day before to Takasbank to enable the relevant asset to be defined in the system. The responsibility for monitoring shall belong to the member.

Valuation haircuts

- **ARTICLE 52** (1) In calculating the valuation haircuts reflecting the deduction rates and to be applied to the collateral and guarantee fund contribution amounts, parametric, non-parametric or simulation-based statistical methods deemed appropriate by Takasbank shall be used. In determining the collateral valuation haircuts, the relevant asset's credit risk assessed by Takasbank, its maturity, its volatility under extraordinary market conditions, its liquidity, and if any, currency risk shall be taken into account.
- (2) The statistical confidence level and the liquidation period to be used in the calculations to be made shall be taken into account as 99.90% and 2 business days respectively. The historical data to be used in the calculations must not be shorter than 1 year. For the assets in which there is insufficient data or no data at all, the haircuts calculated for the assets with similar qualifications shall be defined as reference.
- (3) In calculating the collateral values of non-Turkish Lira assets to be accepted as trade margin, the following valuation haircuts shall be taken as a basis.

Collateral Type	Valuation Haircut
Turkish Lira	100%
Convertible Foreign Currency (USD)	92%
Convertible Foreign Currency (EUR)	93%
Convertible Foreign Currency (GBP)	93%
Government Domestic Debt Securities	91%
Republic of Turkey Undersecretariat of Treasury Foreign Debt Securities (Eurobond)	83%
Lease certificates issued by the Republic of Turkey Undersecretariat of Treasury, Asset Leasing	88%
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	91%
Share Certificates (BIST100)	(76% for BIST 30; 70% for BIST 100)
Equity Umbrella Fund Shares	82%
Debt Instruments Umbrella Fund Shares	88%
Exchange traded gold	%86

Collateral composition limits

ARTICLE 53 - (1) At least 10% of the sum of initial and variation margins calculated in the Market must be composed of Turkish Lira cash collateral. The Board of Directors is authorized to increase this rate according to the developments in the Market. For other assets to be accepted as collateral apart from cash Turkish Lira and the composition limits thereof, the rates given in the following table shall be

applied. Takasbank Board of Directors is authorized to set composition limits for the new assets to be accepted as collateral or revise the composition limits including those defined in this Procedure.

Assets eligible as trade margin	Group Limit	Sub-Group Limit (as percentage of Group Limit)
Cash Turkish Lira	Max. 100%	-
Convertible Foreign Currency (USD/EUR/GBP)	Max. 90%	-
Government Domestic Debt Securities (GDDS)	Max. 90%	50%(Based on ISIN)
Republic of Turkey Undersecretariat of Treasury Foreign Debt Securities (Eurobond)	Max. 90%	20% (Based on ISIN)
Lease certificates issued by the Republic of Turkey Undersecretariat of Treasury, Asset Leasing Company	Max. 50%	20% (Based on ISIN)
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based	Max. 50%	40%
Share Certificates (BIST100)	Max. 40%	20%
Equity Umbrella Fund Shares	Max. 40%	20%
Debt Instruments Umbrella Fund Shares	Max. 20%	20%
Exchange trade gold	Max %25	

(2) Group limits are calculated over the total deposited collateral. In calculating the sub-group limits, the group-limit applied total appreciated portion of the relevant asset amount is taken into account. The amount given to the member as settlement credits shall not be taken in the account in the calculation of the group and sub-group limits.

Updating the values of trade margin

ARTICLE 54 - (l) Assets accepted as collateral are made subject to valuation at the risk calculation times within the day, during the collateral depositing and withdrawal transactions and at the end of each business day over the prices determined by Takasbank to ensure their valuation with the current market prices. At the risk calculation time running at the margin call restoration deadline, the valuation is made with the end of previous day prices.

Valuation	Valuation Criteria	Explanation	
Foreign Currency	Intra-day: Interbank Market Buy - Sale quotation average. End-of-day: CBRT	Average Interbank Market rates throughout the day including the risk calculation time at 18:0 end of day, and for end-of-day risk calculation time, the buying rate published by CBRT	
-Treasury Bonds and Bills-Sukuk	Intra-day: Theoretical price determined by using Takasbank yield curve or the CBRT Prices. End-of-day: Theoretical price determined by using Takasbank end-of-day yield	GDDS/Sukuk: They are valued by using the prices calculated by the yield curve comprising of zero-coupon and fixed-coupon bonds trading in the Exchange Debt Instruments Market, and if access to these prices is not possible, the benchmark daily values of Government Domestic Debt Securities determined by CBRT. Values used in the valuation may vary	

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	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	Intra-day: Last trade price executed in BİAŞ Equity Market before the calculation time. End-of-day: Session-end last trade price.	If 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.
Mortgage-backed securities, mortgage- based securities, asset- backed securities and asset-based securities	yield curve or the price determined by Takasbank.	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
Investment Funds	Price announced by its issuer on the relevant date.	Price announced by its issuer is used for the following business day.
Exchange traded gold	BİAŞ PMD right before any risk calculation batch End of Day:	It is valued at USD / ONS price for T + 0 valued transactions in Precious Metals and Stones Market and at the price calculated by using the foreign exchange buying rate of TCMB at the end of the previous day. If the there is no transaction, the theoretical price can be used as the weighted average price of the previous session.

(2) Prices subject to valuation shall be announced by Takasbank during the day through the Applicable Collateral Report available on Takasbank Integration Menu. Theoretical pricing formulas and methods that can be used in the valuation of assets accepted as collateral by Takasbank shall be published on Takasbank website.

Ownership of collateral

ARTICLE 55 - (1) The ownership of collateral received pursuant to the CCP service shall transfer to Takasbank in accordance with the second paragraph of article 78 of the Law. Takasbank shall acquire the ownership right upon establishment of the contract and by transfer of the assets subject to collateral in compliance with the legal procedures.

(2) In the event that the receivables of Takasbank are required to be covered from collateral due to the default of the Member or because of reasons set forth in the provisions of the agreement or the relevant legislation, Takasbank shall be entitled to sell the asset subject to collateral in the exchange or another organized market, if such asset is listed in any of these markets and cover its

receivables from the sale proceeds thereof without being obliged to fulfill any precondition such as serving any notice or warning, allotting time, obtaining any permission or approval from the administrative or judicial authorities, converting collateral into cash through an auction or another way, etc., or to offset the value of these instruments from the obligations of the debtor

(3) Since the title of collateral belongs to Takasbank pursuant to article 78 of the Law, the rights arising from the collateral shall also belong to Takasbank. Takasbank shall return the collateral together with the rights thereon at the due date in accordance with the provisions of article 27 of

the Central Counterparty Regulation and upon request of the Member, provided that the obligations have been fulfilled.

Collateral monitoring and management

ARTICLE 56 - (1) Collateral associated with the positions of the member's portfolio, its customers, the trading institution's portfolio or its customers are monitored separately in the accounts linked to the member. Collateral associated with the positions of the trading institution or its customers cannot be used for closing any collateral deficit arising from the positions of the member's own portfolio or its customers nor for resolving any default. Collateral of the member associated with its single or multiple customer positions cannot be used for closing any collateral deficit arising from the accounts of the member's own portfolio nor for resolving any default. Collateral associated with the single customer positions can be used solely for closing any margin requirement arising from the positions of the relevant member or for resolving any default. Collateral associated with the member portfolio can be used for covering any margin requirement arising from all position accounts linked to the member or for resolving any default. The provision of the third paragraph of article 78 of the Law shall be reserved.

- (2) Pursuant to article 79 of the Law, Takasbank's rights and powers on the assets it has received as collateral by virtue of the operations it performs as central counterparty cannot be restricted in any manner. The member's lack of power of disposition, for any reason, on the assets subject to collateral shall not prevent Takasbank from a bona fide real right acquisition. Any title or limited real right claim of third parties on the asset values subject to collateral cannot be raised against Takasbank.
- (3) Devoting time for composition about the collateral provider, approval of its composition, devoting time for composition after bankruptcy, entering into composition process by abandoning its assets, restructuring by way of conciliation, its bankruptcy, postponement of bankruptcy, or the relevant provisions of the Law regarding gradual liquidation or the proceeding procedures under the Execution and Bankruptcy Law No. 2004 can under no circumstances limit Takasbank's rights and powers on collateral.

Collateral depositing or withdrawal transactions

ARTICLE 57 - (1) Depositing and withdrawal transactions related to the assets eligible as collateral can be conducted via the member screens or by a written instruction to be given to Takasbank. No direct transaction can be conducted to these accounts.

- (2) Collateral depositing and withdrawal transactions are executed by making electronic transfer from or to the member free accounts.
- (3) 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.
 - (4) Guarantee letter depositing and withdrawal transactions referred to in the temporary provisions of herein Procedure shall only be conducted by Takasbank users until 17:00.
- (5) Depositing and withdrawal deadlines on collateral basis are as follows:

Assets eligible as collateral	Full Day	Half Day	Full Day Withdrawal	Half Day Withdrawal
	Depositing Deadline	Depositing Deadline	Deadline	Deadline
Cash Turkish Lira	18:15	12:45	15:40	11:40
Convertible Foreign Currency (USD/EUR/GBP)	18:15	12:45	18:15	12:45
Government Domestic Debt Securities	18:15	12:45	18:15	12:45
Republic of Turkey Undersecretariat of Treasury Foreign Debt Securities (Eurobond)	18:15	12:45	18:15	12:45
Lease certificates issued by the Republic of Turkey Undersecretariat of Treasury, Asset Leasing Company	18:15	12:45	18:15	12:45
Share Certificates (BIST 100)	18:15	12:45	18:15	12:45
Equity Umbrella Fund Shares	18:15	12:45	18:15	12:45
Debt Instruments Umbrella Fund Shares	18:15	12:45	18:15	12:45
Exchange traded gold	18:15	12:45	18:15	12:45
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	18:15	12:45	18:15	12:45

(6) Withdrawal of required margin amounts shall not be allowed. No collateral withdrawal transaction shall be executed from the accounts having a margin call obligation.

Accrual of interest on cash collateral and guarantee fund contribution amounts

ARTICLE 58 - (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.

CHAPTERSEVEN

Principles Regarding the Guarantee Fund

Guarantee fund and its general principles

ARTICLE 59 - (1) Takasbank, as part of the CCP service it will provide in the Market, establishes a guarantee fund created by the contribution amounts of the members as to be used for any loss that might be incurred in case of default of the members and exceed the collateral of the relevant members. The participation of the CCP members to the guarantee fund is compulsory.

- (2) The guarantee fund contribution amounts of the CCP members are composed of the guarantee fund contribution amounts deposited and the additional guarantee fund contribution amounts to be deposited if requested by Takasbank. Should the Guarantee Fund be used in accordance with the provisions of the CCP Regulation, the Directive and the Procedure, the CCP members may be asked to deposit additional contribution provided it shall not exceed the deposited guarantee fund contribution amount. The Members can be asked to deposit additional contribution amount maximum four times in one-year period between 01 April and 31 March. The additional guarantee fund contribution amount to be requested at once cannot exceed, for each member, the guarantee fund contribution amount calculated and required to be deposited for the month in which the defaults constituting the base of the request have occurred. The additional guarantee fund contribution amount can be requested either once as the entire balance of the deposited amount or at multiple times in tranches provided that it shall not exceed the aggregate of the deposited amount.
- (3) For the CCP members requested to depart from the membership but whose requests have not yet been resolved by the Board of Directors or whose departure request from the membership has been approved by the Board of Directors but have been allotted time for the return of their deposited guarantee fund contribution amounts, the maximum guarantee fund obligation to which they may expose is either two-fold of the guarantee fund amount that should have been deposited as of the month on which the request was made in case of existence of no continuing default whose resolution still continues as of the request date, or is three-fold otherwise. Institutions considered to have departed or requested to depart from the CCP membership to avoid from any possible guarantee fund obligation may not be re-accepted to the CCP membership.
- (4) No recourse to the guarantee fund contribution amounts of other Members can be made unless the trade margins of the defaulting Member, its guarantee fund contribution, and the collections to be made from the insurance policies, if any, and the capital allocation made by Takasbank for the covered risks in the Market become inadequate.
- (5) In case of termination of membership, the guarantee fund contribution amount shall be refunded in accordance with the provisions of article 33 of the Central Counterparty Regulation.
- (6) The assets in the guarantee fund cannot be used other than for their intended purpose.
- (7) Covering the contribution amounts to be deposited to the guarantee fund by the members out of the assets in their possession is essential.
- (8) The guarantee fund is represented and administered by Takasbank.
- (9) The positions related to the marketplaces/platforms and/or securities to which CCP service cannot be provided in accordance with the authorization of the Board shall not be taken into account in the guarantee fund calculations.

Size of the guarantee fund and the contribution to be made by the members

ARTICLE 60 - (1) The size of the guarantee fund cannot be less than the greater of the funding need that would arise in case of joint default of the member with the highest open position and the members with the second and third highest open position under the stress conditions. The funding need comprises of the portion of the members' risks calculated under the stress conditions and remaining out of the amount that can be covered by their trade margins. In estimating the risk under stress conditions through statistical methods, the statistical confidence level and the holding period are taken into account as 99.90% and 2 business days respectively. By taking account of the market conditions, the margin concentrations and the adequacy of collateral management resources,

Takasbank may set the minimum guarantee fund obligation as to be greater than the obligation calculated statistically.

- (2) The contribution to be made by the members to the guarantee fund is composed of the fixed and the variable contribution amounts calculated pro rata to the risks they carry.
- (3) The fixed contribution amount is set at a level not to exceed the average amount found by dividing the required size of the guarantee fund to the number of members.
- (4) The variable contribution amount is found by multiplying the rate calculated by dividing the average collateral amount required to be maintained by the member in the market during the period designated by Takasbank to the average collateral amount of the Market with the minimum guarantee fund size corresponding to the relevant period. The determined amounts are announced through the member screens.
- (5) The deposited guarantee fund contribution of any member cannot be less than the fixed contribution amount. The fixed contribution amounts that must be deposited by the members are 100.000 TRY. This amount is reviewed at least once a year by taking account of the developments in the Market, national or international economy and may be revised if deemed necessary. The length of data set to be used in calculating the size of the guarantee fund to be established and determining the average market participation constituting the basis for the members' variable contribution amounts and given in the fourth paragraph of this article is one month. Guarantee fund contribution amount obligations are calculated at the first business day of each month and updated as of the following business day. The appreciated collateral amount corresponding to the guarantee fund contribution amount reflected to the accounts by Takasbank must be deposited to the accounts until 15:00 on the business day following the day on which the update was made. Collateral restoration deadline on half business days is 11:00. The default provisions shall be applied for any amount failed to be deposited.
- (6) The calculations of the members' guarantee fund contribution amounts can also be made at any time by Takasbank irrespective of the date referred to in the eighth paragraph by taking account of the risk status of the relevant members and the market conditions.

Assets eligible as contribution amount to the guarantee fund and the obligation to restore contribution amount

ARTICLE 61 - (1) Assets eligible as contribution amount to the guarantee fund and the composition limits thereof are given in the following table. Takasbank Board of Directors is authorized to revise the composition limits of the assets to be accepted as guarantee fund contribution amount according to the market conditions and set composition limits for the new assets.

Assets Eligible to Guarantee Fund	Group Limit	Sub-Group Limit (as percentage of Group Limit)
Cash Turkish Lira	Max. 100%	-
Convertible Foreign Currency (USD/EUR/GBP)	Max. 100%	-
Government Domestic Debt Securities	Max. 100%	50% (Based on ISIN)
Republic of Turkey Undersecretariat of Treasury Foreign Debt Securities	Max. 90%	20% (Based on ISIN)
Lease certificates issued by the Republic of Turkey Undersecretariat of Treasury, Asset	Max. 50%	20% (Based on ISIN)

Mortgage-backed securities, mortgage- based securities, asset-backed securities and asset- based securities	Max. 50%	40%
Share Certificates (those included in BIST100 index)	Max. 40%	20%
Equity Umbrella Fund Shares	Max. 40%	20%
Debt Instruments Umbrella Fund Shares	Max. 20%	20%

- (2) The valuation haircuts representing the deduction rates to be used in the calculation of collateral values of the assets to be deposited as guarantee fund contribution amount are given in article 52 of this Procedure.
- (3) Composition limits are calculated over the total deposited contribution amount. In calculating the sub-composition limits, total valued portion of the relevant asset amount is taken into account.
- (4) Non-cash assets used as guarantee fund contribution amount are made subject to valuation over the prices determined by Takasbank to ensure their valuation with current market prices.
- (5) A call to restore contribution amount shall be issued to the accounts having a contribution deficit as a result of the end-of-day valuation. The contribution amounts must be restored until 15:00 on the first business day following the day on which the call was placed. Collateral restoration deadline on half business days is 11:00. The default provisions shall be applied for any amount failed to be restored.
- (6) The non-cash assets included in the Guarantee Fund can be replaced in accordance with the request of the Member.

Principles for use of the guarantee fund

- **ARTICLE 62** (1) In default management, the non-defaulting members' non-cash contribution amounts in the guarantee fund shall be started to be converted into cash when the funds available for use up to item (d) of the first paragraph of article 36 of Takasbank Central Counterparty Regulation fail to be adequate and upon determination that the guarantee fund contribution amounts deposited in cash will remain insufficient.
- (2) The contribution amounts deposited by the members joining to the guarantee fund after the date on which the relevant default has occurred or the contribution amounts deposited by the existing members against the risks they assumed after the occurrence of the default shall not be used.
- (3) In situations which necessitate resorting to the guarantee fund, withdrawal of any contribution amount from the guarantee fund shall not be allowed during the time period to be elapsed until the loss incurred due to such default is fully covered.
- (4) Resorting to the contribution amounts starts with the most liquid assets, and their ability to quickly be converted into cash is taken as the base. Cash amounts converted into cash from non-cash collateral in the guarantee fund but not used shall be returned pro-rata to the members whose non-cash collateral have been used.
- (5) In allotting to the non-defaulting members the loss attributed to the guarantee fund, the shares of the members in the guarantee fund shall be taken as the base.
- (6) The members are obliged to re-deposit, within 3 business days, their deposited guarantee fund contribution amounts used in accordance with the default management.

- (7) If the loss to be attributed to the guarantee fund seems likely to exceed 50% of the fund size, the members may be asked to deposit the additional contribution amounts they have committed. The members are obliged to deposit the additional contribution amounts within 5 business days after the request thereof. The additional contribution amounts not used either in part or at all for resolving the relevant default may be returned. If they, albeit requested, are returned without being used for resolving the default, the request for additional guarantee fund contribution shall be deemed not to have been made.
- (8) The additional guarantee fund contribution amount that could be requested from a member in a month's time cannot exceed the member's guarantee fund contribution amount calculated for that month and required to be deposited.
- (9) If the additional guarantee fund contribution amounts requested from the members due to the default are used either in part or in whole, the members shall be asked to restore their guarantee fund obligations to the amount being calculated pursuant to article 44. The guarantee fund contribution amounts exceeding the maximum loss threshold that any Member would assume in the same month upon the default of other members shall only be used in the event of their own default until the end of the month. The standard guarantee fund contribution amounts to be requested from the members who have fulfilled their maximum additional guarantee fund contribution amount obligation within the one year period between the dates of 1 April-31 March shall only be used for their own default until such one year period is completed.

Returning guarantee fund contributions

- **ARTICLE 63** (1) The contributions other than the fixed guarantee fund contributions in the guarantee fund of the institutions whose membership ends and all revenues and rights related thereto shall be returned to such institutions after deduction of any tax and other legal liabilities required to be paid by taking into consideration of their obligations arising from the transactions they have conducted in the relevant markets and the payment obligations which Takasbank might face due to any default that may occur during the time period elapsed from the Board of Directors' resolution for the termination of membership to the date on which the termination procedures were completed. In case the membership terminates as a result of transfer of a member with all its assets and liabilities to another member, the guarantee fund contribution return operation shall be performed after the first guarantee fund contribution account following the completion date of the transfer operations. The Guarantee Fund calculation shall be made over the total size of the positions corresponding to the calculation period of the two merging members.
- (2) The fixed guarantee fund contributions of the institutions whose membership ends shall be returned at the end of the time period to be designated by the Board of Directors by taking the maturity of all open positions in the market.
- (3) Returning in kind the guarantee fund contributions of the institutions whose membership ends is essential. If returning in kind is not possible, it shall be made analogously. The contributions failed to be returned either in kind or analogously shall be returned over their equivalents. When returning over their equivalents, prices at which the contributions were converted into cash by Takasbank shall be used.
- (4) If there is any cash in the guarantee fund contribution(s) of the institutions whose membership ends, the return operation for returning the cash shall be performed by deducting any tax and other legal obligations required to be paid over the amount to which interest has been accrued.

CHAPTEREIGHT

Principles Regarding Default Procedures for Assets to which CCP Service is provided General principles

ARTICLE 64 - (1) In case of presence of the following situations, the relevant member shall be deemed to have defaulted without the need for any further notice and the default provisions shall be applied.

- a) Failure to fulfill the intra-day and end-of-day margin call obligations calculated by Takasbank within the time period prescribed in this Procedure;
- b) Failure to fulfill the obligation related to the settlement transactions until the cut-off time set forth in the Procedure.
- c) Failure to fulfill the guarantee fund and additional guarantee fund contribution amount restoration obligations within their time period;
- ç) Decision by Takasbank for the liquidation of the member's obligations pursuant to article 13 of the Procedure.
- (2) In the event of default, Takasbank may not allow the member to withdraw its collateral in its relevant accounts. The decision thereof shall be made by Takasbank by considering the size of default, excess/deficit collateral amounts outstanding in the collateral accounts and the market conditions. By taking the size of default and the market conditions into consideration, Takasbank may ask from the Exchange to restrain order transmission over the member's accounts and delete the pending orders from the order book.
- (3) The member can be allotted time by Takasbank to resolve its event of default until 11:00 on the business day following the default date at most. Should the event of default be failed to be resolved until the end of the allotted time period, Takasbank may give order to be traded with the same day value (T+0) to the Market to close the position deficit arising from the default. In order for order to be executed, the trade margin and guarantee fund contribution amounts of the member can be used in addition to its receivables kept blocked against the settlement debt.
- (4) For fulfillment of the cash obligations, the member's transfer time to the relevant cash debt closing account, whereas for fulfillment of security obligations, their transfer time to the settlement pool account at the CRA shall be taken as the base for the debt closing time.
- (5) Default interest shall be applied in the event the settlement, collateral and guarantee fund obligations are failed to be fulfilled within the time periods set forth in this Procedure.

Security default

- **ARTICLE 65** (1) Without prejudice to the limits set forth in article 36 of the Central Counterparty Regulation, the financial liability of Takasbank for the security defaults shall be limited to the delivery of security on the settlement date; and should the security be failed to be delivered on the settlement date, to its delivery by accommodating it from the Market in accordance with the following principles and procedures depending on the market conditions; and if the security is again failed to be delivered in that way, to the payment of its cash equivalent calculated based on the principles and procedures mentioned below plus the designated portion of the default interest to be calculated until the date on which the delivery or payment will be made.
- (2) In the settlement transactions, delivery of security subject to settlement to the beneficiary member by Takasbank is essential upon default of the member obliged to deliver the security. Without prejudice to the default provisions of the security settlement obligor, should the security debt be obtained in part or in whole, the receivable allocation process shall be performed in accordance with the fourth paragraph of article 30 of this Procedure. Any cost incurred by Takasbank during the accommodation of security from the Market shall be collected from the defaulting member.
- (3) If the security required to be delivered by Takasbank is failed to be accommodated from the Market within 2 business days following the security default, the price of the security amount failed

to be delivered shall be paid to the beneficiary. In calculating the price to be paid, the weighted average trade price formed on the previous business day from the payment date of the security subject to default shall be taken as the base.

- (4) A securities beneficiary member on the day of default and a securirites beneficiary member on the day when the default will be terminated by cash may differentiate as default and settlement related securities subjected to the same day netting. The cash payment is made to the members who cannot receive the securities settlement at the end of the second business day following the default.
- (5) In case of security default, the default interest shall be applied pursuant to article 67. A payment shall be made to the security beneficiary for the period to be elapsed until the delivery is fully executed or the security debt is settled by cash payment, up to two-thirds (2/3) of the collected default interest amount for the portion failed to be delivered. If the calculated interest amount remains below the minimum default penalty, the payment shall be made over the calculated amount. The said payments shall be calculated on a daily basis.
- (6) Should the receivable of the security beneficiary be paid by Takasbank in cash, the debt of the security obligor shall also have been converted into cash. Upon conversion of security delivery debt to cash, the obligor shall be obliged to pay such cash together with its default interest to be calculated in accordance with article 67 and 68 of the Procedure.

Cash default

ARTICLE 66 - (1) Without prejudice to the limits set forth in article 36 of the Central Counterparty Regulation, the financial liability of Takasbank for the cash defaults under the item (b) of the first paragraph of article 47 of the Directive shall be limited to the payment of cash on the settlement date; and should the cash be failed to be paid on the settlement date, to its payment in accordance with the following principles and procedures depending on Takasbank's liquidity facilities plus the designated portion of the default interest to be calculated until the date on which the payment will be made.

- (2) If the cash debt is paid off partially or wholly, making payment to the settlement beneficiary within the same day is essential. Without prejudice to the default provisions of the cash settlement obligor, should the cash debt be obtained in part or in whole, the receivable allocation process shall be performed in accordance with the third paragraph of article 29 of the Procedure. For the member failing to resolve its event of default until the end of the given time period, an order shall be placed with the same day value (T+0) by Takasbank to the Market until the end of the business day following the default date to dispose its assets kept blocked against the cash obligation. The collateral and guarantee fund contribution amounts of the member can be used for the termination of the obligation.
- (3) A cash beneficiary member on the day of default and a cash beneficiary member on the day when the default will be terminated may differentiate as default and settlement related securities and cash subjected to the same day netting. In case of cash required to be delivered by Takasbank cannot be obtained from the Market within 2 business days following the default, the cash payment is made to the members who cannot receive a cash settlement at the end of the second business day following the cash default.
- (4) In case of cash default, the default interest shall be applied pursuant to the provision of article 67. A payment shall be made to the cash delivery beneficiary for the period to be elapsed until the cash delivery is fully executed, up to two-thirds (2/3) of the collected default interest amount for the portion failed to be delivered. If the calculated interest amount remains below the minimum default penalty, the payment shall be made over the calculated amount. The said payments shall be calculated on a daily basis.
- (5) The cash delivery obligor shall be obliged to pay such cash together with its default interest to be calculated in accordance with article 67 and 68 of the Procedure.

ARTICLE 67 - (1) Default interest shall be collected together with its legal obligations from the member who have fulfilled its settlement, collateral and guarantee fund obligations after the designated time.

(2) In calculating the default interest, the period between the default date and the date on which the obligation is fulfilled shall be taken into account. That is; the default interest haircut can be differentiated for the obligations that are fulfilled after the designated cut-off time on the settlement

date but in the same day.

- (3) The defaulting member shall be charged a default interest up to the amount to be calculated over the non-fulfilled obligation amount based on the haircuts set forth in the Procedure by applying the higher of the weighted average overnight interest rates formed in BİAŞ Repo Reverse-Repo Market, CBRT Interbank Money Market or Takasbank Money Market.
- (4) The default provisions shall not be applied to the amounts below the minimum default base.
- (5) A lower limit shall be applied to the default interests to be collected. If the calculated default interest remains below the minimum default interest, the minimum default interest shall be applied.
- (6) Amounts for the minimum default base and the minimum default interest shall be determined by also taking account of the revaluation rate published by the Ministry of Finance each year and announced to the members before implementation.
- (7) If Takasbank incurs any loss exceeding the default interest rate due to non-payment of the debt in full or in part, such loss shall be indemnified by the defaulting Member.
- (8) Amounts for the minimum default base and the minimum default interest shall be updated by taking account of the revaluation rate published by the Ministry of Finance each year.

Calculating the default interest

ARTICLE 68 - (1) The default base for the cash obligations is the amount closed with delay, whereas for the security obligations, it is the amount calculated by multiplying the number of securities closed with delay with the daily weighted average price on the trade date.

The following formula is used for the calculation and the legal liabilities are added, if any.

Default interest= base * (base interest/100) * days/360 * haircut

(2) If the obligations are fulfilled on the settlement date after the settlement cut-off time until 17:30 (including 17:30), the haircut shall be applied as 1 (one), and if they are fulfilled at and after 17:31 or on the subsequent days, it shall be applied as 3 (three).

Accrual, notification and collection

- **ARTICLE 69** (1) The default interest and other legal liabilities shall be calculated daily based on the obligations fulfilled with delay or failed to be fulfilled at the end of the relevant day by the member, and the determined amount shall be accrued on the second business day following this.
- (2) The accrued default interest shall be paid together with other legal liabilities within 3 business day following the accrual date.
- (3) Notification of the accrued default interest shall be made in electronic environment through the member screens. Upon delivery of the notification in the electronic environment, the member shall be deemed to have received it without the need for any further warning or notice.
- (4) The default interest and other legal liabilities failed to be paid, albeit accrued, by the member within their time period shall be collected ex-officio by Takasbank from the free current account of the member in the next business day. If they are failed to be collected, interest and other legal liabilities shall also be collected in accordance with the provisions of article 70 of this Procedure regarding the default management process.

Default management process

ARTICLE 70 - (1) The relevant default of the Member whose settlement, collateral and guarantee fund contribution debts have been failed to be closed as a result of the transactions conducted in the Market by Takasbank within the time periods set forth in the Procedure shall be informed to the

Exchange, the Board, CBRT and the relevant member pursuant to article 13 of the CCP Regulation, and all trading authorization of the member on its accounts shall be suspended.

- (2) In addition to the member, revocation of trading authorization of the trading institutions linked to that member, if any, in the Market may also be requested from the Exchange.
- (3) Takasbank may resolve the cash trade margin amounts and guarantee fund contribution amounts of the defaulting member to be excluded from the interest accrual process.
- (4) Takasbank may take one or more than one of the following measures, including but not limited to those, about the defaulting member in accordance with the relevant articles of the Central Counterparty Regulation. In using the default management tools, the reason of default and its impact on the markets shall be taken into account.
 - a) Porting the open positions in the non-defaulting member accounts to a non-defaulting Member either in whole or in part together with their collateral pursuant to article 26 of the Central Counterparty Regulation;
 - b) Converting to cash any non-cash collateral and guarantee fund contribution amount in the customer accounts with collateral deficit that are associated to the defaulting member's own portfolio and to itself;
 - c) Using the excess trade margin of the Member in other markets;
 - ç) Using the guarantee fund contribution amounts of the member in other markets to the extent it has no risk in the relevant Market;
 - d) Acting in accordance with article 46 of the Directive to make use of the guarantee fund contribution amounts of the non-defaulting members;
 - e) Porting the positions and collateral of the customers either ex officio when necessary or upon request of the customers to other members without seeking the consent of the defaulting member;
 - f) Closing the positions in an ex-officio manner;
 - g) Netting any payable, receivable, position, collateral, right and obligations existing with the same party.
- (5) Any deficit occurred after the enforcement by Takasbank against the defaulting member of the default provisions stipulated in this Procedure and the provisions of Chapter Five of the Central Counterparty Regulation and failed to be covered by the collateral and guarantee fund contribution amounts of the defaulting member shall be defined as the loss of Takasbank and other Members and assumed in order as laid down in the first paragraph of article 36 of the Central Counterparty Regulation. Collections to be made later on from the defaulting member shall be distributed pursuant to the fifth paragraph of article 36 of the Central Counterparty Regulation.
- (6) Should the capital allocated in accordance with article 36 of the Central Counterparty Regulation against the covered risks be used due to the default, Takasbank shall restore the used amount within a month. The allocated capital amount to be restored in this way during one year period cannot exceed the amount determined in the beginning of the period. If any default reoccurs within the period of one month to be lapsed until the restoration of the used capital, the remaining portion of the allocated capital, if any, shall be used. The guarantee fund of the non-defaulting members shall be resorted for the portion which cannot be covered. Restoration of the capital shall not necessitate the return of the guarantee fund contribution amounts being used.

Takasbank Default Committee

- **ARTICLE 71** (1) The default interest accrued member may object at Takasbank based on the reasons that the default has occurred without its own fault due to problems arisen from the clearing and settlement, relevant central depository system or payment system or a material mistake has been made in calculating the default interest.
- (2) The objections shall be made at the latest within 1 week after the default accrual date with a letter accompanied by the documents related to the objection.
- (3) The objection of the defaulting member shall be evaluated and resolved by the Default Committee established within the body of Takasbank in accordance with article 35 of the Regulation.
- (4) If the objection made by the member is justified, the default interest shall not be applied, and if it has already been collected, the relevant amount shall be refunded to the member.
- (5) If the objection is declined, the decision shall be informed to the relevant member via a letter.
- (6) The objection shall not inhibit the payment of the default interest within its time period.

Compensation payment

- **ARTICLE 72** (1) A compensation payment shall be made in accordance with the conditions set forth in the fifth paragraph to the member to whom the delivery or payment has been failed to be made on the settlement date due to the default of the member in fulfilling its commitment. However, no compensation payment shall be made for any delivery and payment made with delay within the same day.
- (2) For making the compensation payment, no member request shall be sought. If, on the other hand, the member wishing not to receive any compensation payment informs Takasbank in writing of its request thereof, no payment shall be made to that member.
- (3) In case of a gross settlement-related default, no compensation shall be paid to the extent that the obligor member and the member entitled to compensation payment are the same.
- (4) Two-thirds (2/3) of the default interest collected from the defaulting member shall be paid as a compensation payment against the delayed days to the member to whom delivery or payment has been failed to be made due to the defaulting member. If the default interest is failed to be collected, no compensation payment shall also be paid. The compensation payments are calculated on a daily basis.
- (5) The compensation payments shall be to the members' free current accounts at Takasbank.
- (6) In order for the compensation payment to be made;
 - a) if the defaulting member has made a written objection, the objection should have been deemed null and the collection of the default interest should have been resolved,
 - b) the default should not have been originated from any problem occurred at the Exchange, Takasbank, CRA and CBRT system,
 - c) the beneficiary member should have been fulfilled its settlement obligations on time.

CHAPTERNINE

Principles Regarding Default Procedures for Assets to which CCP Service is not provided

General principles

- **ARTICLE 73** (1) The members failing to fulfill their obligations arising from the transactions conducted in the Market on the settlement date within the times specified in this Procedure shall be deemed to have defaulted without the need for any further notice.
- (2) Default interest shall be collected from the members fulfilling their obligations on the settlement date after the prescribed times or failing to fulfill them on the settlement date but do so on the subsequent days.
- (3) In the fulfillment of cash obligations, the member's transfer time to the relevant cash debt closing account shall be taken as the base.
- (4) In the fulfillment of security obligations, their transfer time to the settlement pool account at the CRA shall be regarded as the debt closing time.

Default interest

ARTICLE 74 - (1) The provisions of article 67 of this Procedure shall be applied in the same manner.

Calculating the default interest

ARTICLE 75 - (1) The provisions of article 68 of this Procedure shall be applied in the same manner.

Terminating the event of default

- **ARTICLE 76** (1) Trading can be performed in the Exchange default market on the next business day in an attempt to terminate the event of default related to any cash/security obligation failed to be fulfilled on the settlement date.
- (2) Should the bid/ask transactions be conducted over more unfavorable rates in terms of the defaulting member, the difference between them shall be collected from the member. If the difference among them is not paid by the member, the amount shall be collected from the trade margin of the member. Should the trades be conducted over more favorable rates in terms of the member, the amount remaining after the fulfillment of the unfulfilled obligation shall be paid to the relevant member.
- (3) The defaulting member shall be obliged to terminate its event of default at the designated time notified to itself.

Accrual, Notification and Collection

ARTICLE 77 - (1) The provisions of article 69 of this Procedure shall be applied in the same manner.

Takasbank Default Committee

ARTICLE 78 - (1) The provisions of article 71 of this Procedure shall be applied in the same manner.

Mistreatment Payment

ARTICLE 79 - (1) The provisions of article 72 of this Procedure shall be applied in the same manner.

CHAPTERTEN

TransferTransactions

General Principles

ARTICLE 80 - (1) Transfer order means:

- a) an instruction of the participant for the transfer within the system of a specific amount of funds between the participants;
- b) an instruction compatible with the system rules, which results in undertaking or fulfillment of the payment obligation;
- c) an instruction of the participant to transfer within the system the rights on the securities or other capital market instruments either in book-entry form or by other means.
- (2) The members can transfer the assets held in their custody accounts to another member account.
- (3) The transfer transactions executed over the system cannot be rejected by the recipient but can be returned by a new transfer order. However, for the transfer transactions executed in an integrated manner with another system, the rules of the relevant system shall apply.
- (4) In the transfer transactions, the moment in which the instruction is approved and the cash/capital market instrument is deposited to the counter member's account shall be the moment in which the instruction cannot be revoked.
- (5) Book-entry security transfer transactions shall be executed in the CRA system between customer sub-accounts.
- (6) Transfer transactions between the members can be executed in the system in two ways: free virement and conditional virement.
- (7) The transfer transactions are executed in two stages: entry and approval.
- (8) Execution of the transfer transactions through the user codes and passwords allocated to the personnel authorized by the members and within the following hours designated by Takasbank is essential.

Transaction type	Time
future value date	17:05
Collective Investment Undertakings Bilateral Instruction transactions	17:00
Collective Investment Undertakings Free of Payment Instruction transactions	21:00

- (9) In case of force majeure, it is also possible to transact by giving a written instruction to the Bank.
- (10) The time periods to be applicable on half-day public holidays shall be separately determined and announced to the members by Takasbank.
- (11) Takasbank facilitates integration with non-Takasbank accounts of the members and with other transfer systems for the transfer transactions to be made from these accounts to the member accounts at Takasbank. For the transfers to be made outside Takasbank, the condition of being a Takasbank member shall not be sought for the institution to whose account the transfer is made.
- (12) If required, the time periods for the transfer transactions may be extended by the approval of the team managers provided that it shall be valid for the system closing time of the relevant day.
- (13) The content, format and method for the transfer transactions shall be announced through the

implementing principles.

Free of Payment Transactions

- **ARTICLE 81** (1) The virement records of the sales transactions conducted by the Funds in the Market are created automatically by the system. The virement shall be executed upon validation and approval of the created records by the users authorized to transact on behalf of the Funds.
- (2) The lending transactions, erroneous virement, erroneous trade and other virement requests shall be performed upon approval by Takasbank of the justified virement instruction sent by the fund and/or portfolio custodians. If it deems necessary, Takasbank may refuse the transaction.

Bilateral transactions

- **ARTICLE 82** (1) Cash and security transfers shall be executed over the system in a simultaneous manner in accordance with the delivery versus payment principle.
- (2) Cash transfers subject to Bilateral transaction shall be executed between the members' cash accounts at Takasbank; whereas the security transfers shall be executed on the system in which the custody balance is held.
- (3) Transaction entered to the system unilaterly until the transaction cancellation deadline but unmatched shall be automatically cancelled by the system. However, recorders entered reciprocally and matched shall be kept in the system for 3 business days including the entry date.
- (4) Instructions transmitted to the system by both members being a party to the transaction shall be automatically matched. The transaction shall be executed upon payment by the members being a party to the transaction of their debts.
- (5) Bilateral instructions with a future value date can be transmitted to the system. The instructions shall be matched on the date on which they were defined to the system and executed on the value date.

Bilateral methods

- **ARTICLE 83 -** (1) Bilateral transactions can be executed in normal and partial settlement. Chain transactions can be generated with the normal Bilateral instructions.
 - (a) A normal Bilateral transaction is executed simultaneously with the fulfillment by the members of their cash and security obligations.
 - (b) In order for a partial Bilateral transaction to be executed, both parties should define the partial transaction option while entering the instruction or the transactions not entered in a partial manner should be made partial thereafter by both members of the transaction.
 - (c) A partial Bilateral transaction is executed in a partial manner pro rata to the obligation being fulfilled as cash and securities.
 - (ç) A chain can be generated with an intent to close any cash/security payable of another Bilateral transaction with the cash/security to be received against a Bilateral transaction. The chain-generating member facilitates completion of the transactions by fulfilling its obligations over the net balance.

CHAPTER ELEVEN

Miscellaneous and Final Provisions

Fees and commissions

ARTICLE 84 - (1) The provisions of article 35 of the General Regulation shall be applied for the

fees and commissions to be charged by Takasbank for the services it provides under this Procedure.

- (2) The fees for the clearing and settlement services under the Procedure shall be determined in accordance with the principles stipulated in article 61 of the Regulation and announced to the members.
- (3) The fees shall be accrued as per the nature of the transaction either at the moment of the transaction or on a monthly basis and collected from the accounts of the member at Takasbank.
- (4) Any commission amount not being objected within 3 business days after its accrual date shall be deemed accepted.
- (5) Any commission failed to be paid within its time period shall be collected ex-officio from the free current accounts of the members.

Disciplinary provisions

ARTICLE 85 - (1) In addition to those contemplated in the Procedure and the Directive, the disciplinary provisions stipulated in the Chapter Seven of the Central Clearing and Settlement Regulation shall be applied to the members failing to comply with the obligations stipulated in this Procedure.

Measures to be taken in extraordinary situations

ARTICLE 86 - (1) Takasbank is authorized to determine and enforce the measures to be taken in case of existence of extraordinary situations where it foresees the clearing and settlement operations of the Market may be adversely affected. In such cases, Takasbank is also authorized to take the measures referred to in article 48 of the Central Counterparty Regulation.

Provisions to be applied in case of no provision in the Procedure

ARTICLE 87 - (1) In case of no provision in the Procedure, the provisions of the Central Counterparty Regulation and the Central Clearing and Settlement Regulation and the Directive shall be applied.

Announcements

ARTICLE 88 - (1) Details and amendments related to the issues included in the scope of the Procedure shall be announced to the members through the General Letters, the Announcement and the Implementing Principles to be published by Takasbank.

Extraordinary situations

ARTICLE 89 - (1) The decision-making processes to be followed in the extraordinary situations and the technical, executional and operational methods and tools thereof shall be defined in the emergency manual prepared by Takasbank and announced to the members.

System Business Continuity

ARTICLE 90 - (1) System business continuity plan and the emergency rules are stipulated by the "Takasbank Business Continuity Regulation", the sub-arrangements and continuity plans associated to this regulation. General policy texts for the business continuity shall be announced to the participants via Takasbank website.

Amendment in system rules

ARTICLE 91 - (1) Takasbank is authorized to amend the system rules. In cases where the amendment of system rules are made subject to the approval of the competent authorities pursuant to the relevant legislation, the amendments shall enter into force upon such approval.

(2) Any structural amendment to be made in the system rules shall be announced to the members at least fifteen days before to enable the members to prepare the necessary technical or legal infrastructure.

Temporary Provisions

ARTICLE 92 - (1) Guarantee letters can be accepted as collateral and guarantee fund contribution amount by the date of 31/12/2018.

- (2) The outstanding guarantee letters shall lose their qualification for being collateral and guarantee fund contribution amount as of 01/01/2019. The members are obliged to replace their guarantee letters by one or several of other collateral types during this time period.
- (3) Only the guarantee letters denominated in Turkish Lira shall be accepted.
- (4) The form and scope of the guarantee letters must be prepared in a compatible manner with the template designated and announced to the members by Takasbank.
- (5) They shall be accepted within the limits of Takasbank.
- (6) Guarantee letters must be definite and unlimited in time.
- (7) Guarantee letters issued to each other by the banks affiliated to the same group or holding and those received by the members from the group or holding banks to which they are affiliated shall not be accepted.
- (8) Prior to delivery of the letter, option from Takasbank must be obtained for the amount of letter and the bank from which the letter is to be received.
- (9) Letters shall be accepted as collateral by Takasbank upon receipt from the issuer bank's Head Office of a written confirmation for the letter and the signature circular of those signing the confirmation letter. Moreover, the letters shall be accepted as collateral in case that there is an active risk record in the issuer bank as a result of query performed on the "Letter of Guarantee Status Inquiry" system developed by the Kredi Kayıt Bürosu.
- (10) Takasbank shall not be held liable for any member mistreatment that may arise from the time periods elapsing during the acceptance and confirmation of the letters and their entry to the system.
- (11) It is possible to provide a single guarantee letter for the entire Equity Market collateral obligations. For which collateral types [Trade Margin (Customer), Trade Margin (Portfolio) and Guarantee Fund Contribution Amount] it will be accepted in a manner not to exceed the amount of guarantee letter shall be indicated in the cover letter.
- (12) Should a single guarantee letter be provided for all collateral types and if the guarantee letter is required to be liquidated due to default, the entire amount of the guarantee letter shall be collected. The amount of liquidated guarantee letter exceeding the obligation shall be transferred to the member's cash collateral account in Turkish Lira.
- (13) In trade margin and guarantee fund contribution valuations, the collateral valuation haircut and the guarantee letter concentration limit shall be applied as 1.0 (100%) and 75% respectively.

CCP Membership

ARTICLE 93 - (1) Direct clearing and settlement members trading in the Market as of the date of entry into force of the Procedure shall be accepted as member to Takasbank with a direct CCP member status.

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% for 1 year from the date when these securities are accepted as collateral in the market.

Enforcement

ARTICLE 94 - (1) The Procedure shall enter into force on the date of its publication.

(2) Istanbul Settlement and Custody Bank Inc. Borsa Istanbul Inc. Equity Market Clearing and Settlement and Collateral Management Procedure shall repeal as of the effective date of this Procedure

Execution

ARTICLE 95 - (1) The provisions of this Procedure shall be executed by the General Manager.