

**ISTANBUL SETTLEMENT AND CUSTODY BANK INC.
BORSA İSTANBUL INC. EQUITY MARKET DIRECTIVE ON CLEARING AND
SETTLEMENT AND CENTRAL COUNTERPARTY SERVICE PRINCIPLES**

**CHAPTER ONE
General Provisions**

Purpose

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

Scope

ARTICLE 2- (1) This Directive 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 by Istanbul Settlement and Custody Bank Inc. as the central clearing agency for BİAŞ (Borsa Istanbul) Equity Market.

Basis

ARTICLE 3- (1) This Directive 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 December 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 June 2013, Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation published in the Official Gazette no. 28711 dated 18 July 2013, Istanbul Settlement and Custody Bank Inc. Central Counterparty Regulation published in the Official Gazette no. 28735 dated 14 August 2013, and the Regulation on Activities of Payment and Securities Settlement Systems published in the Official Gazette no. 29044 dated 28 June 2014.

Definitions and abbreviations

ARTICLE 4- (1) For the purposes of interpretation and implementation of this Directive, the following terms shall bear the following meanings:

- a) **Open Offer Method:** means the method where Takasbank interposes itself between the Market participants becoming seller against buyer or buyer against seller at the time the transaction is matched,
- b) **Exchange/BİAŞ:** means Borsa Istanbul Inc.,
- c) **Multiple Position Account:** means the accounts, which are opened with Takasbank on behalf of CCP members, where positions belonging to the members' own portfolios or their customers are monitored in an aggregated manner, but where, in any event, the positions pertaining to the CCP member itself and the positions pertaining to its customers are segregated,

- ç) **Evaluated Collateral:** means the amount calculated by applying collateral valuation haircuts, group limits and lower group limits to the total collateral deposited,
- d) **General Manager:** means the General Manager of Istanbul Settlement and Custody Bank Inc.,
- e) **General Regulation:** means the General Regulation on the Establishment and Operating Principles of the Central Clearing and Settlement Institutions published in the Official Gazette no. 28662 dated 30 May 2013,
- f) **Intra-day Risk Calculation:** means risk and collateral valuations made using the last intra-day collateral and position balances and prices,
- g) **Trading Institution:** means the institution authorized to execute trading transactions on the market, but executes the settlement of obligations arising from such transactions through intermediation of a general CCP member,
- ğ) **Law:** means the Capital Markets Law no. 6362 published in the Official Gazette no. 28513 dated 30 December 2012,
- h) **Board:** means the Capital Markets Board,
- ı) **CRA:** means the Central Registry Agency (Merkezi Kayıt Kuruluşu Anonim Şirketi),
- i) **CCP:** means the central counterparty,
- j) **Securities:** means any kind of capital market instruments traded at Borsa Istanbul Equity Market and defined as securities in the Capital Markets Law no. 6362,
- k) **Central Counterparty Regulation:** means Istanbul Settlement and Custody Bank Inc. Central Counterparty Regulation published in the Official Gazette no. 28735 dated 14 August 2013,
- l) **Central Clearing and Settlement Regulation:** means Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation published in the Official Gazette no. 28711 dated 18 July 2013,
- m) **Equity Share:** means the security representing the capital of the company and entitling the holder with the shareholding right,
- n) **Market:** means Borsa Istanbul Inc. Equity Market,
- o) **Position:** means the clearing and settlement debts and credits arising in relation to transactions executed at the Market,
- ö) **Procedure:** means the application principles comprising 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:** means Takasbank system established for clearing of transactions executed at BİAŞ Equity Market,
- r) **Clearing and Settlement:** means 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:** means Istanbul Settlement and Custody Bank Inc.,
- ş) **Single Position Account:** means the accounts held as sub-accounts of the accounts opened with Takasbank on behalf CCP members, where the positions pertaining to a single customer of the members or pertaining to the members' own portfolios are monitored,
- t) **Collateral Accounts:** means the accounts opened with Takasbank on behalf of CCP

members and used for monitoring the collaterals that should be maintained by the members due to the positions pertaining to their own portfolios or the positions of their customers,

- u) **Collateral Received for Clearing and Settlement:** means the amount collected from members for the securities for which CCP service is not provided in order to protect such securities subject to default against price change risks from the date of occurrence until the date of resolution of an event of default,
- ü) **CBRT:** means the Central Bank of the Republic of Turkey (Türkiye Cumhuriyet Merkez Bankası Anonim Şirketi),
- v) **Member:** means the CCP members that are allowed to be a party to clearing services provided by Takasbank as the central counterparty at the Market, within the framework of article 6 of the Central Counterparty Regulation,
- y) **Directive:** means the Directive on Principles regarding Clearing and Central Counterparty Service to be provided by Istanbul Settlement and Custody Bank Inc. for BİAŞ Equity Market,
- z) **Board of Directors:** means the Board of Directors of Takasbank.

CHAPTER TWO

Membership Principles

Membership

ARTICLE 5- (1) Investment institutions meeting the requirements prescribed in article 8 of the Directive may become a member of the CCP practices to be provided by Takasbank on the system for the transactions executed at the Market providing that they are authorized by the Board of Directors.

Membership types

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

(2) Direct CCP members are authorized to execute their own and/or their customers' clearing and settlement transactions only.

(3) General CCP members are authorized to execute the clearing and settlement transactions of trading institutions as well as their own and/or their customers' clearing and settlement transactions.

(4) The general and direct CCP membership classification is made by taking into consideration the member's equity capital amount, the adequacy of its internal systems and technical infrastructure as well as the internal rating, financial analysis and intelligence studies carried out by Takasbank.

(5) The time for application for general CCP membership in the market is specified in the Procedure.

Transition between membership types

ARTICLE 7- (1) The membership status of general and direct CCP members may be amended considering their compliance with the conditions set forth by Takasbank. In this context, a direct CCP member may be accepted later as a general CCP member and vice versa, a general CCP member may be later accepted as a direct CCP member.

(2) General CCP members may apply to become a direct CCP member. The applications of general

CCP members to this effect may be accepted by Takasbank provided that all rights, obligations and accounts, if any, related to the trading institutions of which clearing and settlement transactions are executed are transferred or settled completely.

(3) The applications for general CCP membership submitted by direct CCP membership meeting the eligibility criteria for general CCP membership shall be finally resolved by Takasbank.

(4) In case the members losing their eligibility conditions for general CCP membership fail to meet the related criteria again within the time period specified by the Board of Directors starting from the date of notice sent by Takasbank in relation to such loss of eligibility conditions, they may be authorized as direct CCP members. In such cases, it is compulsory that the transfer or settlement of all rights, obligations and accounts, if any, related to the trading institutions should be completed. In case of failure to meet this obligation, article 13 of this Directive shall apply.

CCP Membership requirements

ARTICLE 8- (1) Takasbank shall determine and assess the compliance with membership conditions and at least the following conditions must be met for membership:

- a) The membership conditions specified in the Central Clearing and Settlement Regulation should be met,
- b) The authorization of trading at the Market must not have been cancelled due to any contradictions with the legislation,
- c) The agreement and/or undertakings related to CCP service, the contents of which are determined by Takasbank, must have been signed and submitted to Takasbank,
- ç) The financial strength must be at an adequate level to fulfil its commitments towards Takasbank,
- d) The other information and documents to be requested by Takasbank must have been submitted,
- e) The statements related with information technologies, risk management, internal control and internal audit systems, arranged in the form specified by Takasbank, must have been approved by the members' Board of Directors and duly submitted,
- f) For Brokerage Houses to become Direct CCP Members,
 - i. They must have a restricted or general custody service license pursuant to the related legislation,
 - ii. They must have a minimum equity capital of TRY10.000.000,
 - iii. They must have received at least D rating score as a result of the internal rating conducted by Takasbank.
- g) For Brokerage Houses to become General CCP Members,
 - i. They must have obtained the operating permit related to general custody service enabling them to provide the custody of positions and collaterals arising from the transactions executed,
 - ii. They must have a minimum equity capital of TRY75.000.000,
 - iii. They must have received at least B rating score as a result of the internal rating analysis conducted by Takasbank.
- ğ) For Banks to become General CCP Members,

- i. They must have obtained the operating permit related to general custody service enabling them to provide the custody of positions and collaterals arising from the transactions executed,
- ii. They must have a minimum equity capital of TRY500.000.000,
- iii. They must have received at least B rating score as a result of the internal rating analysis conducted by Takasbank.

(2) In the context of internal rating analysis conducted by Takasbank to determine the rating score of the company; the related company's financial statements, annual report, company introductory information form, company key information form, trading volumes in the markets, TRY custody balances, default and intelligence information, the credit ratings received from the rating agencies, if any, market intelligence information and the news in the printed and visual media are used. Takasbank announces, on its website, the parameters that it considers in its internal rating methodology and the impacts of such parameters on the rating scores.

(3) Takasbank is authorized to determine the minimum criteria that it shall seek for technical infrastructure, information technologies, risk management, internal control and internal audit systems, to grant an extra period for compliance to the institutions failing to meet the prescribed criteria, and to receive commitments and to check whether the criteria are met or not.

(4) The Board of Directors is authorized to increase the minimum equity capital amounts or to decrease them back to their previous levels by taking the relevant capital markets and banking regulations and the market conditions into consideration.

Membership application and admission

ARTICLE 9- (1) The institutions that will apply for membership are required to submit their application requests addressed to the General Management of Takasbank together with a letter accompanied by the information and documents verifying the fulfilment of the requirements for membership prescribed in this Directive and to send to Takasbank the information and documents specified in article 10 of the Central Counterparty Regulation and the following documents, which shall also be enclosed to the aforesaid letter.

- a) Membership application form,
- b) Authorization/License Certificate (notary-certified copy),
- c) Document to be obtained from the Exchange indicating that the investment institutions applying for direct CCP membership are operating at the Market,
- ç) Membership Agreement and Pre-Agreement Information Form,
- d) Letter of Undertaking for Cash, Assets, Collateral, Bilateral and Electronic Funds Transfer (EFT) Instruction,
- e) Implementation Agreement regarding Customer Instructions that shall be sent to Istanbul Settlement and Custody Bank Inc. via fax,
- f) Other documents that may be requested by Takasbank under the relevant legislation.

(2) For evaluation of membership applications by Takasbank, the information and documents specified in the first paragraph of this article and the other information to be requested by Takasbank must have been completed. The applications are assessed by Takasbank in terms of fulfillment of the conditions stipulated in article 8. The decision taken by Takasbank in relation to the application is notified to the related person/entity in writing within 2 months.

(3) In order to commence its operations with Takasbank, the institution whose membership

application is accepted should, within 1 month from the date of notice of acceptance of its membership application;

- a) Deposit the membership admission fee,
- b) Deposit the membership collateral,
- c) Deposit the Guarantee Fund contribution amount and
- ç) Authorize the personnel that will execute transactions on behalf of the Member on Takasbank system.

Otherwise, the membership right granted to the relevant institution shall be revoked. The date when such obligations are fulfilled is deemed as the date on which the related institution becomes a member of central counterparty service provided at the Market and the member becomes entitled to execute transactions as of such date.

General obligations of members

ARTICLE 10- (1) Members are required to comply with the following requirements:

- a) To act in accordance with all the rules and principles laid down in this Directive and the other related legislation in relation to market clearing transactions and central counterparty services,
- b) To act in compliance with the principles of good faith and integrity towards its clients and other members,
- c) To deposit the guarantee fund contributions stipulated by Takasbank,
- ç) To take all necessary measures to ensure sustainability of internal control, risk management and internal audit mechanisms necessary to become a CCP member,
- d) If a segregated individual account is opened and where it is required to migrate member accounts with Takasbank and associated sub-accounts and the general CCP member that will acquire them is identified in advance; to add the information related thereof in the framework agreements signed with its customers,
- e) In case of opening of a segregated individual account, to ensure that its customers are fully and accurately informed about the structure of the accounts where the collaterals are monitored and the extent of segregation provided by Takasbank, as well as the facts that the member has the right of disposition on the collateral accounts opened with Takasbank and that this power is restricted by Takasbank as limited with the collateral required to be held only,
- f) To inform the customers about the facts that the positions of other customers are also monitored under multiple position accounts, that the collaterals associated with such accounts shall be used for the total risk arising from multiple position account, and that it is accepted by Takasbank that collaterals associated with such accounts belong to the member,
- g) To cover the collaterals to be deposited for portfolio accounts completely from their own assets,
- ğ) To cover the collaterals to be deposited for multiple customer position accounts from their own collaterals or from the collaterals over which it has gained the right of disposition in accordance with the Law,
- h) If the collaterals deposited for multiple customer position accounts have been obtained from the customers or other persons and institutions through transfer of ownership

agreements, to establish an effective recording and monitoring system which shall ensure protection of transfer of ownership agreements and matching of customers, persons and institutions from which the collaterals are obtained with the collaterals deposited in multiple customer position accounts,

- 1) To act in accordance with all principles and rules specified in the Law and the other related regulations in relation to monitoring and safekeeping of customer assets and collaterals,
 - i) To timely fulfil the fee, charge, commission and other obligations required by Takasbank,
 - j) To ensure adaptation to system changes to be made by Takasbank within the specified periods and to participate in the tests,
 - k) To establish constant reconciliation between records related to position accounts held with Takasbank and to the portfolio/customer positions and collaterals held by it,
 - l) To deposit collaterals into respective collateral accounts held with Takasbank,
 - m) To provide any and all information and documents that may be requested on issues deemed necessary by Takasbank and the Board in relation to their business and transactions falling under the scope of this Directive, and to provide any and all support during the investigations to be carried out by those assigned by Takasbank and the Board,
 - n) To keep the other records decided by Takasbank in addition to the books and records that it is legally obliged to keep, and to duly arrange the information and documents; and to send them to Takasbank periodically or when requested by Takasbank and to keep such records and documents for 1 year,
 - o) To fulfil other obligations under this Directive within the prescribed time limit and in a complete manner.

(2) If any member foresees that it will be unable to either partially or completely fulfil its obligations, the related member is required to notify such situation immediately to the Board and the other related public agencies and institutions together with all substantiating information and documents including the reasons thereof. Such notification shall not constitute an impediment for Takasbank preventing it from taking the necessary measures specified in this Directive.

Responsibilities of General CCP Members

ARTICLE 11- (1) The general CCP member executing the clearing and settlement transactions of a trading institution shall be unconditionally responsible towards Takasbank for fulfilling the obligations related to the transactions conducted by the relevant institution through itself. The general CCP member executing the clearing and settlement transactions and the trading institution of which clearing and settlement transactions are executed by that member shall be liable towards Takasbank as the joint debtors and several guarantors for the obligations arising from the trading institution's transactions of itself and of its customers that are executed through the related general CCP member.

(2) A general CCP member is responsible for monitoring whether the obligations set forth in article 12 have been actually fulfilled by the trading institutions whose clearing and settlement operations are performed by that member; taking all necessary measures in cases where 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 cases where it is also determined that such obligations have still not been fulfilled despite the measures.

(3) The general clearing 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 executed at the Market are transferred to another general CCP member or liquidated.

Trading Institutions

ARTICLE 12- (1) The positions and collaterals of trading institutions are monitored in the exclusively opened sub-accounts connected to the general CCP members.

(2) Trading institutions are liable to fulfil the following requirements:

a) To comply with the regulations specified in this Directive and the Procedure to be issued based on this Directive in relation to the collateralization methods and the monitoring of the customer positions and collaterals held both with them and with the relevant general CCP member,

b) To act in accordance with all principles and rules specified in the Law and the other related regulations in relation to monitoring and safekeeping of customer assets and collaterals,

c) To establish continuous reconciliation between the accounts of their customers held with the general CCP member that they are affiliated to and the records related to customer positions and collaterals held with them,

ç) To ensure that their customers are fully and accurately informed about the facts that the related general CCP member has right of disposition on the collateral accounts of their customers opened with the general CCP member or Takasbank; and that this right is restricted by Takasbank in relation to the accounts held with it and limited with the collaterals required to be held only,

d) To provide any and all information and documents that may be requested on issues deemed necessary by the relevant general CCP member, Takasbank and the Board in relation to their business and transactions falling under the scope of this Directive, and to provide any and all support during the investigations to be carried out by those assigned by Takasbank and the Board,

(3) If it is determined by the relevant general CCP member that a trading institution has failed to fulfil the obligation referred to in the second paragraph herein either in part or as a whole, then it shall immediately notify Takasbank of this situation together with all information and documents substantiating non-fulfilment of such obligations; and take all necessary measures to correct such discrepancies thereof.

(4) In cases where the relevant trading institution has failed to completely fulfil its obligations despite all measures taken by the general CCP member; the positions and collaterals pertaining to the trading institution's customers shall, upon request of the relevant general CCP member sent to Takasbank, be transferred to the relevant CCP member making such a request in accordance with the agreement between each other in order to ensure protection of the customers of trading institutions. Such transfer is executed considering the prices of the positions and collaterals as determined by Takasbank. The trading institution shall notify the ownership information related to the customer positions and collaterals transferred as such to the Member that takes over them. Takasbank shall inform the Board and the related public authority of the transfer process and the reasons of such transfer received from the relevant general CCP member within 1 business day.

(5) The provisions stipulated in the other regulations applicable for trading institutions are reserved.

Restriction of member activities

ARTICLE 13- (1) Members' activities under this Directive may be restricted by Takasbank under the following circumstances.

- a) Suspension of its activities at the markets or for the capital market instruments for which clearing and settlement service is provided or termination of membership pursuant to article 13 of the Central Clearing and Settlement Regulation or article 14 of the Central Counterparty Regulation,
 - b) Failure to fulfil the obligations specified in the Directive, the Procedure and the membership agreement,
 - c) Determination of unfavorable situations related with the member such as protest, seizure, provisional injunction, etc., or temporary or permanent suspension of its activities, cancellation of its relevant operating permit, prohibition to execute transactions related to capital market instruments traded at the Market for any reason, or a decision of gradual liquidation or bankruptcy issued against them or any negative intelligence received,
 - ç) Determination of the fact that the credit rating of the member has either diminished or does not exist at all as a result of the intelligence, financial analysis and/or rating studies periodically conducted by Takasbank.
- (2) In case of occurrence of any of the situations specified herein, Takasbank may decide to liquidate the member's current positions in part or as a whole.
- (3) If the member's operations are restricted for the reasons specified herein, the situation is notified to the Exchange, the Board and the relevant public authority.

Termination of membership

ARTICLE 14- (1) CCP membership may be terminated by a decision of the Board of Directors if;

- a) It is determined by Takasbank that the member no longer qualifies for any of the CCP membership requirements set forth in this Directive and the other related regulations,
 - b) It is determined by Takasbank that significant risks that may jeopardize safe and uninterrupted operation of the CCP system have arisen due to the failure to fulfil the obligations set forth in this Directive and the other related regulations,
 - c) The CCP members whose operations have been restricted subject to the provisions of the second paragraph of article 14 of the CCP Regulation have failed to fulfil the related obligations within a maximum period of six months granted to them pursuant to the sixth paragraph of the same article,
 - ç) The related CCP member requests so,
- (2) Those willing to terminate their CCP membership pursuant to subparagraph (4) of the first paragraph herein notify Takasbank of the situation in writing. However, it is required that the related member willing to terminate its CCP membership must have fulfilled all of its obligations under this Directive and the other related regulations. In such cases, the Board of Directors may permit for termination of CCP membership. If the request for termination of the membership is submitted without fulfilling all obligations under the Directive and other regulations, the member shall be given a period of 30 days for fulfilling such obligations. The member that fulfills such obligations within the period of time granted shall notify Takasbank of such case in writing, and the request for termination by the

member shall be addressed at the next meeting of the Board of Directors following such notification. Members who fail to fulfill such obligations within a period of 30 days may only apply for terminating their membership once they have closed all their positions.

(3) Takasbank receives the opinion of the Exchange while terminating the membership of a CCP member.

(4) In order to ensure regular and continuous execution of transactions of the trading institutions, whose clearing and settlement operations are executed by those whose CCP membership has been terminated, Takasbank is authorized to take all necessary measures including, also, the transfer of the positions of relevant trading institutions and their customers to another general CCP member.

(5) Even in case of termination of CCP membership, the liabilities of the relevant institution towards Takasbank with regard to the transactions executed until the date of the Board of Directors' resolution related to termination of membership which are arising from this Directive and the other related regulations shall survive.

(6) It is required that the Board, the other related public agencies and institutions and the related market operator must be urgently notified of the member whose CCP membership is terminated.

CHAPTER THREE

Clearing and CCP service principles

Takasbank's responsibility

ARTICLE 15- (1) Takasbank is the central counterparty through the open-offer method used in transactions executed at the Market and cleared in the System. In such transactions, Takasbank guarantees completion of clearing and settlement by acting as seller against buyer or as buyer against seller. Without prejudice to the limitations specified in article 36 of the Central Counterparty Regulation, Takasbank, as the central counterparty, assumes the clearing and settlement obligations arising from the transactions executed at the Market by the members in accordance with the principles and procedures specified in this Directive and the legislation.

(2) In the open offer method, Takasbank's liability towards the parties to the transaction starts at the moment when the buy and sell orders are matched at the Market and ends with the completion of the clearing and settlement. Takasbank's liability towards the parties in relation to the transactions cancelled by the Exchange shall cease at the moment when the necessary updates are made by Takasbank in relation to cancellation of transactions. If, pursuant to paragraph 4 of article 5 of the Central Counterparty Regulation, the transaction-based limit allocated for the member is exceeded, Takasbank shall, without prejudice to the provisions of article 33, not be liable for any loss or damages that may arise from the transactions that it has avoided.

(3) In the transactions executed at the Market, Takasbank deals with the members only. Takasbank is not liable for the obligations of the members towards their customers and of general CCP members towards trading institutions.

(4) The risks related with the issuer are excluded from the guarantee given as a CCP.

(5) The provisions specified in Chapter Five of the Central Counterparty Regulation shall apply for meeting the liquidity needs and covering the losses that may arise in case of any default.

Marketplaces and platforms where clearing and CCP services are provided

ARTICLE 16- (1) Clearing and settlement of all transactions executed at the marketplaces and platforms under the structure of the Market is conducted by Takasbank except for the exemptions brought by the Board. The provision of article 17 of the Central Clearing and Settlement Regulation is reserved.

(2) Clearing and settlement of transactions executed in foreign currencies at the marketplaces/platforms under the structure of the Market is finalized by Takasbank using the accounts held with the correspondent bank and/or Takasbank.

(3) The Board of Directors of Takasbank may, if also approved by the Board and upon the Exchange's request or by obtaining the Exchange's opinion, take a decision to provide clearing service only and to not provide CCP service or to terminate CCP service for some of the marketplaces or platforms already existing or to be newly established within the Market or for some securities already traded or to be newly issued. The clearing and settlement operations for the marketplaces/platforms and/or securities for which CCP service will not provided upon the Board's permission are performed by Takasbank in accordance with Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation and in line with the rules specified herein in relation to the procedures and principles of such operations and the related details are specified in the relevant procedures.

(4) Collaterals at the amounts determined by Takasbank in accordance with the methods specified by Takasbank may be received from the members for further use in case of any defaults that may arise from the clearing and settlement transactions related with the securities for which CCP service is not provided at the Market. The collaterals received for clearing and settlement are collected from the members in order to protect the securities subject to default against any price change risks during the period from occurrence of any default until its resolution. Takasbank's liability for any events of default related with securities for which CCP service is not provided is limited with the collaterals received for clearing and settlement. The procedures and principles regarding default management are specified in the Procedure.

Settlement date and period

ARTICLE 17- (1) The settlement date of transactions executed at the Market is the second business day following the trading day (T+2).

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

(3) Settlement processes to be applied on half-days are determined by Takasbank and announced to members.

(4) It is not possible to conclude the clearing and settlement process through fulfilment of securities or cash obligations by the parties before the settlement date.

(5) The Market's settlement cut-off times are determined by the Board of Directors of Takasbank through obtaining the Exchange's opinion.

(6) Cash and security settlement obligations related with the transactions executed at the Market are fulfilled within the hours specified in the Procedure. Otherwise, default provisions shall apply.

(7) Settlement period may be temporarily changed by the General Manager due to the problems arising from clearing, custody, payment or market operation systems.

Currency

ARTICLE 18- (1) The currency used in execution of transactions is used for payment of cash obligations arising from settlement operations.

(2) Takasbank may allow for fulfillment of cash clearing and settlement obligations in any other currencies different from the currency used in execution of transactions in accordance with the principles to be determined in the Procedure.

Certainty of settlement

ARTICLE 19- (1) Settlement instructions and transactions and payment transactions arising from the trading transactions executed at the Market are irreversible and cannot be cancelled under any circumstances including, also, temporary or permanent suspension of member's activities, and initiation of liquidation process at administrative and judicial authorities.

(2) The Exchange is informed for urgent suspension of transactions at the moment the member's activities are suspended or any decision that may lead to such a consequence is notified to Takasbank.

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

(4) The member's available cash and security balances held with and the collaterals deposited to Takasbank are used to discharge the obligations.

Netting

ARTICLE 20- (1) While calculating net debit or credit amount of transactions executed at the Market, it is essential to apply multilateral netting method, considering, also, the securities-based customer/portfolio segregation. Cash credits or debts are created against the net security debts or credits arising from such netting-off process.

(2) The Board or the Exchange may decide for fulfilment of clearing and settlement obligations without netting; application of gross settlement on Market, marketplace, trading platform, security or investor basis; exemption of market maker and/or liquidity provider members from application of gross settlement; exclusion of settlement of wholesale purchase and sale transactions, trade reports and some other special transactions from netting process; and performance of netting for the transactions between two members only or exclusion of specific transactions from netting process.

Delivery versus payment principle

ARTICLE 21- (1) In settlement transactions, delivery versus payment principle is applied. Pursuant to this principle; the settlement receivables of the members that do not fulfil their settlement obligations on the settlement day are not paid.

(2) In consideration for the obligations that are partially fulfilled, receivables are also partially paid in proportion with the debts covered on the settlement day.

Order of liquidity

ARTICLE 22- (1) Settlement operations may be executed by dividing the assets traded at the Market into two groups such as liquid and non-liquid assets.

(2) Takasbank may use the cash amounts deposited by members for executing the settlement transactions of non-liquid assets only until the time to be designated by it.

Rectify

ARTICLE 23- (1) Corrections related with the transactions executed at the Market are made in the System. The principles and procedures and the applicable method for correction of transactions are determined by a Procedure and announced to members.

Give-up

ARTICLE 24- (1) A member may transfer its positions to another member. The principles and procedures regarding such migration of positions are determined by a Procedure and announced to members.

Market clearing processes

ARTICLE 25- (1) At the end of the buy-sell transactions executed at the Market, net assets/cash debts and receivables are separately determined for the member's customers and portfolio individually on a security basis.

(2) The members' rights and obligations arising from their transactions subject to settlement are finalized on account using the related cash or securities accounts designated by Takasbank. Obligations are fulfilled by the members that have a security debt using Takasbank clearing accounts at the CCP, and by the members that have a cash debt using the cash clearing and settlement accounts held with Takasbank.

(3) The settlement is collectively concluded through settlement of the highest amount of records at periodical intervals specified by Takasbank. It is also possible to partially fulfil settlement obligations; and partial settlement is executed inconsideration for the partially-fulfilled obligations at the times designated by Takasbank.

(4) The Exchange notifies Takasbank of the transactions executed at the Market, but decided to be settled outside Takasbank.

Inter-market setoff processes

ARTICLE 26- (1) It is possible that the receivables from a market/marketplace may be set off against the debts arising from the other market/marketplace transactions based on the cash and/or security set-off instructions sent by the members for such set-off between the markets operated by Takasbank and the markets/marketplaces where clearing service is provided. The principles and procedures regarding set-off are determined under a Procedure and announced to members.

CHAPTER FOUR

Account Transactions

Account structure

ARTICLE 27- (1) It is required that all members willing to execute transactions at the Market should open their cash and securities accounts necessary for execution of settlement operations with

Takasbank, CCP, and if required by the nature of the transaction, the correspondent bank to be designated by Takasbank.

- (2) Trading, position and collateral accounts are opened with Takasbank for monitoring the transactions, positions and collaterals.
- (3) Trading Account is the account where the orders matching at the Market are monitored on a transaction basis.
- (4) Position accounts hold the net amounts calculated after netting the transactions. Risk management is conducted over position accounts.
- (5) Collateral accounts where the collaterals related with the positions pertaining to the members' own portfolios or their customers are monitored are opened with Takasbank. Customer/portfolio segregation is not made for collateral accounts used for monitoring the marketplace/platform and/or securities for which CCP service will not be provided within the framework of the Board's permission.

Account types

ARTICLE 28- (1) Position and collateral accounts associated with trading accounts can be opened with Takasbank in two different types such as "Customer" and "Portfolio" accounts. Portfolio account is the account used for monitoring the transactions executed by the member for its own portfolio. It is essential that customer positions are collectively monitored in multiple position accounts. Customer and/or portfolio segregation is not made for the accounts used for monitoring the marketplace/platform and/or securities for which CCP service will not be provided within the framework of the Board's permission.

- (2) Single portfolio and multiple customer position accounts are opened for trading institutions; such accounts are affiliated with the general CCP member, but separate from the CCP member's other customer and trading institution accounts.
- (3) It is required that in the Equity Market, customer positions and collaterals should be monitored in the related customer's collateral sub-accounts and the single position accounts opened with Takasbank and associated with the related CCP member, if requested by the relevant CCP member. The conditions required to be met by the customers that may request for opening of a single account and/or minimum position sizes are determined under the procedure.
- (4) Members separately monitor the positions and collaterals pertaining to their own portfolio and their customers' positions and collaterals through the accounts to be opened in Takasbank system. It is accepted by Takasbank that the collaterals deposited by the members to the collateral accounts associated with multiple position accounts belong to the Member.

Opening of accounts

ARTICLE 29- (1) It is required that the accounts through which transactions will be executed should be defined in Takasbank system.

- (2) It is mandatory to open an account with the general CCP member for trading institutions.

Segregation

ARTICLE 30- (1) In the Market, customer transactions, positions and collaterals are monitored in the multiple or single trading and position accounts held in connection with the member and the collateral

accounts associated with such accounts, separately from the member's own transactions, positions, and collaterals.

(2) The transactions, positions and collaterals belonging to the Member's own portfolio are monitored in a single trading and position account and the collateral account associated with such account which shall be exclusively opened for members.

Account migration

ARTICLE 31- (1) Positions followed in single or multiple position accounts and collaterals related to such positions may be migrated by Takasbank among CCP members, upon the transferor and transferee CCP members' instructions, and if deemed appropriate by Takasbank. In such cases, the transferor CCP member obtains the written approval of its customers whose positions and collaterals will be transferred.

(2) For migration of multiple position accounts, the instruction of all customers holding positions in the accounts is required. Multiple position accounts, for which instructions are given by the customers for migration, and the associated collaterals are migrated upon the member's instruction.

(3) Takasbank reserves the right to reject account migration requests for the soundness and security of the clearing and settlement operations.

(4) In case of migration to another member of the positions and associated collaterals monitored through the accounts pertaining to a member whose activities have been restricted due to default or other reasons or whose membership has been terminated; the migration operations are conducted by Takasbank:

a) If the transferee member has been predetermined in the agreement signed between the transferor member and Takasbank, subject to the provisions of such agreement,

b) If, although the transferee member has not been predetermined in the agreement previously signed between the transferor member and Takasbank, an agreement is signed between the transferor member and the transferee member until the date the migration will be executed; subject to the provisions of such agreement,

c) If a transferee member can be found by Takasbank in the event no such predetermination has been made in accordance with the provisions specified in the subparagraphs (a) and (b) of this paragraph.

(5) In case of an account migration operation, the collaterals held in the transferred accounts cannot be withdrawn until the reconciliation between Takasbank records and the records kept by the member whose activities have been restricted or whose membership has been terminated is completed. Provisions regarding the proceedings initiated by administrative and judicial authorities are reserved.

(6) In cases where the Member's operations in the Market are restricted or its membership is terminated, the collateral amount that can be migrated from or returned to the associated customer accounts is limited with the collateral amount that will remain after the variation margin amounts arising from the event of default are reflected to the accounts.

(7) In cases where no member can be found to take over the positions and collaterals, or there is no sufficient time to find a member, or if the accounts cannot be migrated due to collateral deficit or have collateral deficit arising after settlement of positions; then the relevant accounts may be liquidated in accordance with the principles set out in Chapter Five of the Central Counterparty Regulation. Any collateral balance remaining after settlement of positions in the accounts that cannot be transferred due

to unavailability of a transferee member is returned pursuant to article 27 of the Central Counterparty Regulation.

(8) Regarding the accounts connected to a member whose operations are restricted due to default or other reasons or whose membership is terminated; if such accounts are related with the marketplaces/platforms for which CCP service will not be provided pursuant to the Board's permission or if the securities held in such accounts are the securities for which the Board has given permission for non-provision of CCP service, Takasbank may not necessarily provide migration service for the positions related to such marketplace/platform/securities.

CHAPTER FIVE

Risk Management and Margining Principles

Risk management

ARTICLE 32- (1) Risk management at the Market is conducted by Takasbank. At the Market, pre-trade, at-trade and post-trade risk management processes are applied for the securities for which CCP service is provided at the Market. Takasbank may apply the pre-trade risk management method to ensure that there is sufficient collateral in the account, taking into account the likelihood that the orders will match. The rules regarding the transactions related with the accounts that do not have sufficient collateral before the time of transaction and the accounts for which a margin call is received are determined in the Procedure.

(2) The settlement positions, guarantee fund contributions and collaterals held in the portfolio and customer accounts opened by the members with Takasbank are updated by Takasbank at least at the end of every working day.

(3) Upon valuation at day end, margin call is triggered for the accounts which are in deficiency in collateral. Margin calls are issued via member screens provided by Takasbank and/or by way of reporting. If a margin call is sent via the system, the member is deemed to have received it without a further warning and notice. The member's responsibility starts at the moment the margin call issued by Takasbank is received by the member.

(4) Members may fulfill their margin call obligations by depositing collateral or offsetting positions. Deposit and withdrawals of collaterals, valuations, account updates and fulfillment of obligations are carried out on a position account basis. Intra-day and end-of-day risk management processes that will be applied by Takasbank, contents of the model and/or parameters to be used in calculation of margins, related calculation methods and the deadlines for covering the margin call are described in the procedure.

(5) In the calculation of the collateral amount received for settlement in relation to the marketplaces/platforms and/or securities for which CCP service will not be provided under the Board's permission, the methods and parameters applied for the marketplaces/platforms and/or securities for which CCP service is provided shall be used. The other principles and procedures related with the collaterals received for risk management and settlement are specified in the related Procedure.

Risk limits

ARTICLE 33- (1) Takasbank defines risk limits for the Members in proportion with their solvency at the Market where it serves as the CCP. Risk limits may be determined for the Market individually or in aggregate for all the markets for which CCP service is provided. Risk limits are determined over the

margin amounts required to be maintained due to the positions carried by Members in the markets where CCP service is provided.

(2) The limit determined on an individual member basis is notified by Takasbank to the relevant member.

(3) It is checked during intra-day risk calculations whether the total amount of margin required to be maintained for all positions taken by the member on its own and on behalf of its customers exceeds the risk limit in all markets where CCP service is provided.

(4) The members may be allowed to exceed the defined risk limit up to a maximum rate to be specified in the Procedure providing that they deposit additional initial margin. If the maximum rate specified in the procedure is exceeded, it may be requested from the Exchange to prevent the member from sending orders to the Market regardless of deposition of additional initial margin. It is mandatory that additional initial margins must be covered from the member's own assets or the assets on which the member has gained the right of disposition.

CHAPTER SIX

Principles Regarding Collaterals

Membership collateral

ARTICLE 34- (1) General CCP members and direct CCP members deposit TRY 10.000 and TRY 5.000, respectively, as membership collateral to cover the losses that may be incurred as a result of failure to fulfil the obligations towards Takasbank related to the dues, fees, commissions and other liabilities within the period granted to them. This amount may be re-determined by the Board of Directors considering the developments in the Market providing that the Board's approval is obtained. Membership collateral is deposited in Turkish Liras.

(2) If Members fail to fulfil their obligations under the first paragraph, Takasbank collects the related amount from the membership collateral. After such collection, the Member supplements the membership collateral to the required levels specified in the first paragraph within 3 business days. If such deficit amount is not supplemented, the related amount is collected ex officio from the member.

(3) In case of termination of membership, the membership collateral is returned providing that all obligations of the member towards Takasbank are completely liquidated.

Collaterals

ARTICLE 35- (1) Margins are requested from members to cover the risks arising from securities positions for which CCP service is provided at BİAŞ Equity Market. In determining statistical parameters constituting the basis for margins, the confidence levels and holding periods to be specified in the Procedure shall be used providing that the confidence level must be not less than 99,50%, and the holding period must be not less than 2 days. The historical data sets to be employed in volatility calculations must cover at least the last 12-month period, if available.

(2) While calculating margin requirements for the securities positions for which CCP service is provided at the Market, portfolio-based net margining method is used. When margin requirement is calculated, positions pertaining to the customers and the positions pertaining to the member portfolio are not netted-off. The application principles regarding margining method are described in the procedure.

(3) A member has to cover its margin obligation arising from its own portfolio using its own

collaterals, its margin obligation arising from multiple customer position accounts using its own collaterals or the collaterals over which it has the right of disposition, its margin obligation arising from the positions of trading institution portfolio or its customers using own collaterals or the collaterals received from and belonging to the trading institution or on which the trading institution has the right of disposition. It is accepted by Takasbank that the collaterals deposited by the members to the collateral accounts associated with multiple position accounts belong to the Member.

(4) The positions related with the marketplaces/platforms and/or securities for which CCP service will not be provided under the Board's permission are followed in an individual account belonging to the member, separately from the positions for which CCP service is provided and the margin amount collected for settlement is calculated over the netted positions held in such account. In the valuation of collaterals collected for settlement, the parameters and assets determined in relation to the marketplaces/platforms and/or securities for which CCP service is provided are used.

Assets acceptable as collateral and guarantee fund contributions

ARTICLE 36- (1) Members may use the following assets in order to fulfil their margin obligations. Takasbank Board of Directors is authorized to accept the other assets specified under article 19 of the Central Counterparty Regulation as collateral or guarantee fund contributions.

- a) Cash (Turkish Lira),
- b) Convertible Currency (USD/EUR/GBP),
- c) Government Debt Securities,
- ç) Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey
- d) Lease Certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey,
- e) Shares in BIST 100 Index,
- f) Equity Umbrella Fund Shares,
- g) Debt Instruments Umbrella Fund Shares,
- ğ) Standard gold traded on the exchanges,
- h) Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities
- ı) Borsa İstanbul A.Ş. shares,
- i) Government debt securities issued by G7 countries,
- j) Electronic Warehouse Receipt

(2) Takasbank may not necessarily accept, as collateral or guarantee fund contribution, the securities and guarantees that it considers to be connected to the member due to possible specific correlation links between the member's credit worthiness and the value of assets received as collateral, or restrict their acceptability as collateral and guarantee fund contributions. The principles regarding eligibility as collateral related with the assets considered associated with the member's credit worthiness are determined in the procedure.

(3) The criteria regarding the assets to be accepted as collateral in the mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities group and the date on which above mentioned assets and Borsa İstanbul A.Ş. shares to be accepted as collateral is determined in the Procedure.

(4) Takasbank may apply concentration limits for assets considered by it as collateral or guarantee fund contributions for a single market or all markets where CCP service is provided pursuant to article 43 of the Central Counterparty Regulation. The principles for application of concentration limits are specified in the procedure.

(5) Theoretical pricing formula and methods that may be used in valuation of assets accepted by Takasbank as collateral and guarantee fund contributions are published on Takasbank website.

Valuation haircuts

ARTICLE 37- (1) In calculation of valuation haircuts to be applied to collaterals and guarantee fund contributions, reflecting deduction rates; parametric, non-parametric or simulation-based statistical methods deemed suitable by Takasbank are used. In determining collateral valuation haircuts, the credit risk of the related asset as assessed by Takasbank, its term of maturity, volatility under extraordinary market conditions, liquidity, and if any, the currency risk are taken into account.

(2) The statistical confidence level to be used in such calculations cannot be less than 99,75% and the liquidation period cannot be less than 2 business days. It is essential that historical data to be used in calculations should be not less than 1 year. The valuation haircuts for the assets without sufficient or historical data are determined through benchmarking against the haircuts calculated for the assets bearing similar qualities.

Collateral composition limits

ARTICLE 38- (1) At least 10% of the total of initial and variation margins calculated at the Market must consist of cash collaterals in Turkish Lira. The Board of Directors is authorized to increase this ratio according to the developments in the Market. The ratios specified in the table given below are applied for other assets to be accepted as collaterals in addition to cash in Turkish Lira and the related composition limits. Takasbank Board of Directors is authorized to determine composition limits for new assets to be accepted as collaterals or change the composition limits including those specified in this Directive.

Assets Acceptable as Trading Margin	Group Limit	Lower Group Limit (As Percentage of Group Limit)
Cash (Turkish Lira)	Maximum 100%	-
Convertible Currency (USD/EUR/GBP)	Maximum 90%	-
Government Debt Securities	Maximum 90%	35% (Based on ISIN)
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Maximum 90%	35% (Based on ISIN)
Lease Certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Maximum 50%	40% (Based on ISIN)
Shares in BIST100 Index	Maximum 90%	20%

Equity Umbrella Fund Shares	Maximum 50%	20%
Debt Instruments Umbrella Fund Shares	Maximum 50%	20%
Standard gold traded on the exchanges	Maximum 25%	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	Maximum 50%	40%
Borsa İstanbul A.Ş. shares	Maximum 50%	-
Electronic Warehouse Receipt	Maximum 25%	20%

- (2) The valuation haircuts reflecting deduction ratios, which will be used in calculation of collateral values of the assets to be deposited as collaterals, are described in the Procedure.
- (3) Group limits are calculated over the total collaterals deposited. In calculation of lower group limits, total appraised portion of the related asset amount to which group limit is applied is taken into account.
- (4) Assets accepted as collaterals are subjected to valuation over the prices determined by Takasbank in order to ensure that they are valued at current market prices, during the intra-day risk calculations and collateral deposition and withdrawal processes and at the end of each trading day. The application principles regarding determination of collateral values are described in the Procedure.

Title to collaterals

ARTICLE 39- (1) The title to collaterals collected under CCP service passes to Takasbank pursuant to the second paragraph of article 78 of the Law. Takasbank acquires the title at the moment of execution of the agreement and as a result of transfer of collateral assets in compliance with legal procedures.

(2) In cases where the receivables of Takasbank are required to be covered from collaterals due to the member's default or the reasons specified in the applicable laws or the provisions of the agreement, Takasbank shall be entitled to sell the assets provided as collaterals at any exchange or organized market where they are listed, if any, and to cover its receivables from the sale proceeds thereof, or to set off the values of such instruments against the debtor's obligations, without any requirement to fulfil any prerequisites such sending a further warning or notice, granting any period, receiving any permit or approval from any administrative or judicial authority, converting the collateral into cash through an auction or any other means whatsoever.

(3) Since Takasbank has title to collaterals pursuant to article 78 of the Law, the rights arising from collaterals also vest in Takasbank. Takasbank shall return the collaterals together with the related rights at the end of maturity pursuant to the provisions of article 27 of the Central Counterparty Regulation and upon the Member's request; provided, however, that all obligations must have been fulfilled.

Monitoring and management of collaterals

ARTICLE 40- (1) Collaterals associated with positions pertaining to the Member's portfolio or its customers or to the trading institution's portfolio or its customers are separately monitored in the accounts linked to the member. Collaterals associated with the positions pertaining to the trading

institution or its customers cannot be used for covering the collateral deficits caused by the positions pertaining to the member's own portfolio or its customers or for resolution of default. The collaterals associated with the member's single or multiple customer positions cannot be used to cover the collateral deficits caused by the accounts pertaining to the member's own portfolio or for termination of default. The collaterals associated with single customer position accounts can be used only for covering the collateral deficits caused by the positions pertaining to the related customer or for resolution of default. The collaterals associated with the member's portfolio can be used for covering the collateral deficits caused by all position accounts associated with the member or termination of default. Provision of the third paragraph of article 78 of the Law is reserved.

(2) Pursuant to article 79 of the Law, Takasbank's right and power over the values of assets that it has received as collateral due to the transactions it executes as the central counterparty cannot be restricted under any circumstances. Absence of the member's right of disposition over the value of assets provided as collaterals due to any reason does not prevent Takasbank's bona fide real right acquisition. Any third persons' claims or limited real right claims over the value of assets provided as collaterals cannot be raised against Takasbank.

(3) Granting of a period for composition with creditors for the party providing collaterals, approval of such a composition, granting of a period for composition after bankruptcy, entry into a composition process through cession of assets, restructuring through settlement, bankruptcy, postponement of bankruptcy, or enforcement proceedings initiated pursuant to the Execution and Bankruptcy Law no. 2004 or the provisions regarding gradual liquidation as stipulated in the Law cannot in any way restrict Takasbank's right and power over the collaterals.

Collateral deposition and withdrawal operations

ARTICLE 41- (1) The principles and procedures regarding deposition, withdrawal or change of assets acceptable as collaterals and the related periods are specified in the Procedure.

Utilization of cash collaterals and guarantee fund contributions

ARTICLE 42- (1) The cash collaterals in Turkish Lira and guarantee fund contributions deposited by members are, after deduction of the portion to be set aside as required margin, utilized by Takasbank under the best conditions possible considering the credit risk and liquidity conditions and in accordance with the principles specified in the Procedure. Such accretion process is conducted within Takasbank limits by depositing the amount subject to accretion to the banks under safe custody or as deposits and using them in repurchase (repo) transactions. Takasbank may also place the cash collaterals on the organized money markets for investment purposes. Accretion may not be applied under extraordinary market conditions. In case that Takasbank cannot conduct any accretion process due to market conditions, no accretion interest is paid.

(2) From the gross accretion interest amounts gained after utilization of the amounts of collaterals and guarantee fund contributions following deduction of the mandatory provisions required to be set aside, Banking and Insurance Transactions Tax (BITT) and other statutory costs and the amount to be collected by Takasbank as "collateral monitoring and investment fee" at the rate proposed by Takasbank and approved by the Board are deducted; then, the remaining balance is added to the relevant accounts as accretion interest.

CHAPTER SEVEN

Principles Regarding the Guarantee Fund

Guarantee Fund and general principles

ARTICLE 43- (1) Takasbank establishes a guarantee fund comprising the contributions of members under the CCP service that it will provide at the Market, which will be used for the portion of losses that may be incurred in the event of members' default, in excess of respective members' margins. It is mandatory that CCP members have to participate in the guarantee fund.

(2) CCP members' guarantee fund contributions are comprised of the contributions deposited and the additional guarantee fund contributions to be deposited upon Takasbank's request. If the Guarantee Fund is used subject to the provisions of the CCP Regulation, Directive and Procedure, CCP members may be asked to deposit additional contributions not exceeding deposited guarantee fund contribution amount. Members may be asked to deposit additional contributions for maximum four times during one- year period between the dates of April 1 – March 31. The additional guarantee fund contribution that may be requested at one time cannot exceed the guarantee fund contribution amount calculated per member to be deposited in the month that the defaults constituting the basis for the request have occurred. Additional guarantee fund contribution amount may be requested at one time equal to the total amount deposited or more than once in tranches providing not to exceed the total amount deposited.

(4) For the CCP member that has requested the termination of its membership and has notified Takasbank in writing that the member has fulfilled all obligations under the Directive and other regulations but whose request has not yet been approved by the Board of Directors or whose request for termination of its membership has been approved by the Board of Directors but has been allotted time for the return of its deposited guarantee fund contribution, the maximum guarantee fund obligation for which it may be liable on and after the date on which the member submitted its request for the termination of its membership shall be either two-fold of such member's the guarantee fund amount calculated at the day-end operations of the first business day in which the request was made in case of existence of no continuing default whose resolution still continues as of the request date, or shall otherwise be three-fold. If the member's request for termination of its membership is submitted without first fulfilling all its obligations under the Directive and other regulations, these rates shall be applied as three and four times. Institutions considered to have terminated or requested the termination of its CCP membership to avoid from any possible guarantee fund obligation may not be re-accepted to the CCP membership. It is not possible to have recourse to the guarantee fund contributions of the other Members unless the defaulting Member's trading margins, guarantee fund contribution, and, compensations to be made under insurance policies, if any, and the capital allocation made by Takasbank for the risks covered at the Market remain insufficient.

(5) In case of termination of membership, guarantee fund contribution is refunded pursuant to the provisions of article 33 of the Central Counterparty Regulation.

(6) The assets in the guarantee fund cannot be used for unintended purposes.

(7) It is essential that the contributions to be deposited by members in the guarantee fund are covered from the assets under their property.

(8) The guarantee fund is represented and managed by Takasbank.

(9) The positions related with the marketplaces/platforms and/or securities for which CCP service will not provide under the Board's permission are not taken into account in the guarantee fund calculations.

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

ARTICLE 44- (1) The size of the guarantee fund cannot be less than the larger of the resource requirement that will arise in the event of default of the member with the largest open position under stress conditions. The resource requirement is comprised of the portion of members' risks calculated under stress conditions remaining outside the part that can be covered with trade margins. In estimation of the risk under stress conditions using statistical methods, the statistical confidence level, holding period and historical data specified in the Procedure are used, which cannot be less than 99,75%, 2 business days and 5 year, respectively. Takasbank may set the minimum guarantee fund obligation higher than the statistically calculated obligation, considering the market conditions, margin concentrations and the adequacy level of default management resources.

(2) The calculation regarding the total size of guarantee fund is renewed at least every 3 months, and the adequacy of the current guarantee fund is tested.

(3) The contributions to be made by members into the guarantee fund are comprised of fixed and variable contributions calculated in proportion to risks carried by them.

(4) The fixed contribution is determined at a level that will not exceed the average amount calculated by dividing the size of guarantee fund by the number of members and is announced in the Procedure.

(5) The variable contribution is calculated by Takasbank in light of average collateral amount that the member should keep available in the market. It is announced via member screens.

(6) A member's deposited guarantee fund contribution cannot be less than the fixed contribution amount.

(7) The length of the data set that will be employed in calculation of the size of the guarantee fund and in determination of members' average market participation constituting the basis for variable contribution is described in the Procedure.

(8) Guarantee Fund contribution obligations are calculated on first business day of every month, and updated the following business day. Appraised collateral amount corresponding to the guarantee fund contribution amount reflected by Takasbank to the accounts should be deposited into the accounts within the period specified in the Procedure. Default provisions apply for the amounts not deposited.

(9) The calculations of members' guarantee fund contributions may be performed by Takasbank at any time regardless of the date specified in the eight paragraph, considering the related members' risk status and market conditions.

Assets acceptable as guarantee fund contribution and the obligation to supplement such contributions

ARTICLE 45- (1) The assets acceptable as guarantee fund contributions and the related composition limits are shown in the table below. Takasbank Board of Directors is authorized to change the composition limits of the assets to be accepted as guarantee fund contributions according to market conditions and to set composition limits for new assets.

Assets Acceptable for Guarantee Fund	Group Limit	Lower Group Limit (As Percentage of Group Limit)
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Cash (Turkish Lira)	Maximum 100%	-
Convertible Currency (USD/EUR/GBP)	Maximum 100%	-
Government Debt Securities	Maximum 100%	35% (Based on ISIN)
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Maximum 100%	35% (Based on ISIN)
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Maximum 50%	40% (Based on ISIN)
Shares in BIST100 Index	Maximum 90%	20%
Equity Umbrella Fund Shares	Maximum 50%	20%
Debt Instruments Umbrella Fund Shares	Maximum 50%	20%
Standard gold traded on the exchanges	Maximum 25%	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	Maximum 50%	%40
Borsa İstanbul A.Ş. shares	Maximum 50%	-
Electronic Warehouse Receipt	Maximum 25%	%20

- (2) The valuation haircuts reflecting deduction ratios, which will be used in calculation of collateral values of the assets to be deposited as guarantee fund contributions, are described in the Procedure.
- (3) Composition limits are determined over the total contribution amounts deposited. In the calculation of lower composition limits, the total appraised portion of the related asset amount is taken into account.
- (4) Non-cash assets used as guarantee fund contributions are subjected to valuation over the prices determined by Takasbank in order to ensure that they are appraised at current market prices.
- (5) Contribution margin call is issued to accounts with contribution share deficit following end-of-day valuation. Contributions must be supplemented until the end of deadline specified in the Procedure. Default provisions apply for the amounts that cannot be supplemented.
- (6) Non-cash assets in the Guarantee Fund may be changed upon the Member's request.

Principles for use of guarantee fund

ARTICLE 46- (1) In default management, when resources available for use up to subparagraph (d) of first paragraph of article 36 of Takasbank Central Counterparty Regulation fall short and it is understood that the guarantee fund contributions will be insufficient; non-cash contributions in the guarantee fund belonging to the solvent members that have not defaulted are started to be converted to cash.

- (2) The contribution amounts deposited by the members that have joined the guarantee fund after

the date of occurrence of the relevant default or the contributions deposited by the existing members against the risks they assumed after occurrence of such default are not used.

(3) In cases necessitating a recourse to and use of guarantee fund, it is not permitted to withdraw contributions from the guarantee fund within the time period that will elapse until closure of the loss incurred due to the default.

(4) The use of contribution amounts starts with the most liquid asset; and high convertibility to cash is taken as the basis. Cash amounts derived from conversion of non-cash collaterals in the guarantee fund into cash, but not used, are returned to the members whose non-cash collaterals have been used on a pro-rata basis.

(5) In the distribution of loss covered by the guarantee fund to the non-defaulting members, the shares of the members in the guarantee fund are taken as the basis.

(6) Members are obliged to re-deposit, within 4 business days, their deposited guarantee fund contributions which have been used for default management.

(7) If the loss to be covered from the guarantee fund seems likely to exceed 50% of the fund size, members may be asked to deposit additional contribution amounts that they have undertaken. Members are obliged to deposit such additional contributions in 5 business days following the related request. Additional contributions that are not used at all or used in part for resolving the relevant default may be returned. If such contributions, albeit requested, are returned in full without being used for resolution of default, then the request for additional guarantee fund contribution is deemed as not made.

(8) The additional guarantee fund contribution amount that may be requested from any member in one-month period cannot exceed the related member's guarantee fund contribution amount required to be deposited as calculated for the related month.

(9) If the additional guarantee fund contributions requested from the members due to default are used either in part or as a whole, then the members are asked to supplement their guarantee fund obligation up to the amount calculated pursuant to article 44. The guarantee fund contributions exceeding the maximum loss threshold that any member would be exposed to in the same month in case of default of other members are used only in the event of the related member's own default until the end of the month. Normal additional guarantee fund amounts to be requested from members that have fulfilled their additional guarantee fund contribution obligations within one year period between 1 April – 31 March are used only for their own defaults until the current one-year period is completed.

CHAPTER EIGHT

Principles Regarding Default Processes For The Assets For Which CCP Service is Provided

General principles

ARTICLE 47- (1) If one of the following situations occurs, the relevant member shall be deemed to have defaulted without any further notice and default provisions shall apply.

- a) Failure to fulfil intra-day and end-of-day margin call requirements calculated by Takasbank within the period specified in the Procedures,
- b) Failure to fulfil the settlement obligations until the end of the cut-off time specified in

the Procedure,

c) Failure to fulfil the obligations to deposit guarantee fund and additional guarantee fund contributions within due period,

ç) The decision taken by Takasbank for liquidation of the member's obligations pursuant to article 13 of the Directive.

(2) In case of any default, Takasbank does not allow the defaulting member to withdraw its collaterals in the respective accounts. Takasbank may, considering the size of the default, request from the Exchange to block the transmission of orders over the member's accounts.

(3) Takasbank may grant a period to the Member to terminate the event of default until the time specified in the Procedure not later than the next business day following the date of default. If the event of default is not terminated until the end of the period granted as such, Takasbank may send orders to the Market for covering the position deficit arising from such default and executing same-day value (T+0) transactions. For execution of such orders, the receivables blocked against the settlement debt and the member's trading margin and guarantee fund contribution amounts may be used.

(4) If settlement, collateral and guarantee fund obligations are not fulfilled within the periods specified in the Procedure, default interest shall accrue.

Default related with assets

ARTICLE 48- (1) Without prejudice to the limits specified in article 36 of the Central Counterparty Regulation; Takasbank's financial liability for any default related with assets under subparagraph (b) of the first paragraph of article 47 of the Directive is limited with the delivery of the asset on the settlement date; and in case of failure in delivery on settlement date, its delivery after procurement from the Market in accordance with the principles and procedures specified below; and in case of impossibility of such delivery, the payment of its cash consideration calculated in accordance with the principles and procedures specified below together with the portion of the default interest that will be calculated until the date of such delivery or payment.

(2) It is essential that, in settlement processes, in case of default of the member liable to deliver the asset, the asset subject to settlement should be delivered by Takasbank to the creditor member. Without prejudice to the provisions regarding default of the debtor liable for settlement of assets, if the asset debt is provided in part or as a whole, it is delivered by Takasbank to the settlement creditor within the same day. The costs incurred by Takasbank during procurement of asset from the Market are collected from the defaulting member.

(3) If the asset that should be delivered by Takasbank cannot procured from the Market in 2 business days following the default related with such asset, the price of the assets that could not be delivered is paid to the creditor. In calculation of the payable amount, the average trade price of the asset that is the subject of default, which has accrued one day before the payment day, is taken as the basis.

(4) The member to receive securities on the day the default occurs could be different than the member to receive securities on the day when the default will be forced into liquidation. Cash payment is made to the member/s who could not get securities at the end second business day after the default occurred.

(5) In case of a default related to assets, the default interest specified under article 50 shall apply. Two-third (2/3) of the default interest amount collected shall be paid to the Recipient of the asset in relation to the undelivered part for the time period that will lapse until complete fulfilment of the physical delivery or until the liquidation of the asset debt through cash payment. If the interest amount calculated remains below the minimum default penalty, the payment is made over the calculated amount.

- (6) If the receivables of the recipient of the asset is paid by Takasbank in cash, then the debt of the debtor of the asset shall be deemed as converted into cash. After conversion of the debt to deliver the asset into cash, the debtor shall be liable to pay such cash amount together with the default interest to be calculated pursuant to article 50.
- (7) Other matters related to non-delivery of security are to be determined in the Procedure.

Default related with cash

ARTICLE 49- (1) Without prejudice to the limits specified in article 36 of the Central Counterparty Regulation, Takasbank's financial liability for any default related with cash under subparagraph (b) of the first paragraph of article 47 of the Directive is limited with payment of cash on settlement date; and in case of failure to pay such cash on settlement date, payment in accordance with the principles and procedures specified below depending on the market conditions and Takasbank's liquidity facilities, and in addition, the specified portion of the default interest to be calculated until the date of actual payment.

- (2) If the cash debt is closed out in part or as a whole, the settlement creditor is paid on the same day. For any member that does not terminate the event of default until the end of the period granted, Takasbank sends orders to the Market for execution of sales of assets blocked in consideration for the cash obligation with the same value date (T+0) until the end of the business day following the default date. The member's collaterals and guarantee fund contributions may be used for discharge of the obligation.
- (3) As cash and securities related to settlement and default are netted on the same day, the member to receive cash on the day the default occurs could be different than the member to receive cash on the day when the default has occurred. In case when cash to be delivered by Takasbank cannot be obtained from the market within 2 business days following the default, cash payment is made to the member/s who could not get cash receivables at the end second day after the default occurred.
- (4) In case of a default related to cash, the default interest specified under the provisions of article 50 shall apply. An amount up to two-thirds (2/3) of the default interest amount collected with respect to undeliverable part is paid to the cash delivery creditor, for the period until full completion of cash delivery. If the interest amount calculated remains below the minimum default penalty, the payment is made over the calculated amount.
- (5) The cash delivery debtor is liable to pay such cash amount together with the default interest to be calculated pursuant to article 50.
- (6) Other matters related to non-delivery of cash are to be determined in the Procedure.

Default interest

ARTICLE 50- (1) Default interest is collected together with the legal obligations from the members that fulfil their settlement, collateral and guarantee fund obligations after the specified time.

- (2) In calculation of default interest, the period between the date of default and the date of fulfilment of the obligation is taken into account. However, the default interest coefficient may vary for obligations fulfilled after the specified cut-off time on the settlement date, but on the same day.
- (3) The defaulting member shall be charged a default interest over the non-fulfilled obligation amount, to be calculated over the highest of the weighted average overnight interest rates at BİAŞ Repo-Reverse Repo Market, CBRT Interbank Money Market or Takasbank Money Market based on the coefficients specified in the Procedure.

- (4) Provisions on default do not apply for the amounts below the minimum default base. Minimum default base is specified in the Procedure.
- (5) Lower bound is applied to default interests to be collected. Minimum default interest is specified in the Procedure.
- (6) The amounts related with minimum default base and minimum default interest are determined considering the revaluation rate announced by the Ministry of Finance according to the Market conditions every year and announced to members before application.
- (7) If Takasbank has incurred a loss exceeding default interest due to failure to fulfill the debt in part or as a whole, this loss is compensated by the defaulting Member.

Accrual, notification and collection

ARTICLE 51- (1) Accrued default interest is paid together with the other statutory obligations within 3 business days following the accrual date.

(2) Accrued default interest is electronically notified via member screens. Following such electronic notification, the member is deemed to have received such notification without any need for a further warning or notice.

(3) The default interests and other legal obligations that are not deposited by the member within the statutory period despite their accrual are collected by Takasbank directly from the member's current account on the following business day. If it cannot be collected, interest and other legal obligations are also collected in accordance with the provisions of article 52 regarding default management process.

Default management process

ARTICLE 52- (1) The respective default of the member that have failed to timely fulfil its settlement, collateral and guarantee fund contribution obligations and whose settlement, collateral and guarantee fund contribution debt cannot be closed out as a result of the transactions executed by Takasbank at the Market within the periods specified in the Directive is notified to the Exchange, the Board, CBRT and the related member pursuant to article 13 of the CCP Regulation and the member's rights and power to execute any kind of transactions over its accounts are suspended.

(2) In addition to such Member, it may also be requested from the Exchange to suspend the right and power of the trading institutions associated with the member to execute transactions at the Market.

(3) Takasbank may also decide for exclusion of the defaulting members' cash trade margin amounts and guarantee fund contributions from accretion and interest accrual processes.

(4) Takasbank may apply one or several of the following measures (without limitation) against the defaulting member pursuant to the related articles of the Central Counterparty Regulation. During use of default management tools, the reason of the default and its impacts on the markets are taken into consideration;

a) Migration of the open positions in the solvent client accounts together with their collaterals to another solvent member in part or as a whole pursuant to article 26 of the Central Counterparty Regulation,

b) Conversion into cash of the defaulting member's non-cash collaterals and guarantee fund contributions in its own portfolio accounts and in the accounts of its associated customers with collateral deficit,

- c) Use of the member's excess trade margins at other markets,
- ç) Use of the member's guarantee fund contributions at other markets, providing that such member has no risk at the respective Market,
- d) Acting in accordance with article 46 for use of guarantee fund contributions pertaining to non-defaulting members,
- e) Migration of customers' positions and collaterals to the other members directly or upon customers' request if and when required and without any need for the defaulting member's consent,
- f) Direct closure of positions,
- g) Netting the debt, credit, position, collateral, rights and obligations with the same party.

(5) The deficits arising after application by Takasbank of the default provisions specified in this Directive and the provisions of Chapter Five of the Central Counterparty Regulation against the defaulting member, which cannot be covered from the defaulting member's collaterals and guarantee fund contributions, are defined as the loss of Takasbank and other members and assumed in the given order specified in the first paragraph of article 36 of the Central Counterparty Regulation. The collections that will be subsequently made from the defaulting member are distributed pursuant to the fifth paragraph of article 36 of the Central Counterparty Regulation.

(6) In case that the capital allocated for the risks covered under article 36 of the Central Counterparty Regulation is spent due to default, Takasbank shall supplement the deficit amount in one month. The allocated capital amount that will be supplemented as such in a one-year period cannot exceed the amount specified in the beginning of the period. In case of recurrence of a default during the one-month period that will elapse until replenishment of the reduced capital, the remaining portion of the allocated capital, if any, is used. Non-defaulting members' guarantee funds are used for the part that cannot be covered. Replenishment of capital does not necessitate the return of guarantee fund contributions used.

CHAPTER NINE

Transfer Operations

General Principles

ARTICLE 53- (1) Members may transfer the assets held in custodian accounts to another member's account.

(2) Book-entry security transfer transactions are executed between the customer accounts over CCP system.

(3) Inter-member transfer processes are conducted in 2 ways such as free and bilateral transfer over the system.

(4) It is essential that transfer transactions should be executed using the user codes and passwords allocated for the personnel authorized by members within the hours specified in the Procedure as determined by Takasbank.

(5) The times that will apply for half-days and public holidays are separately determined by Takasbank and announced to members.

(6) The periods related with such transfer processes are specified in the Procedure.

CHAPTER TEN

Final Provisions

Fees and commissions

ARTICLE 54- (1) The provisions of article 35 of the General Communiqué apply for the fees and commissions that Takasbank will charge to its members in relation to the services provided by it under this Directive.

Disciplinary provisions

ARTICLE 55- (1) The disciplinary provisions specified in Chapter Seven of the Central Counterparty Regulation as well as the provisions specified herein shall apply for members that fail to comply with the obligations specified in this Procedure.

Measures to be taken in case of extraordinary situations

ARTICLE 56- (1) Takasbank is authorized to determine and apply the measures to be taken in case of occurrence of the extraordinary situations where it foresees that Market settlement transactions will be adversely affected. In such cases, Takasbank is authorized to take the measures specified in article 48 of the Central Counterparty Regulation.

Provisions that shall apply for any issues not specified in the Directive

ARTICLE 57- (1) The provisions of the Central Clearing and Settlement Regulation and the Central Counterparty Regulation shall apply for any issues not specified in the Directive.

Temporary Provisions

ARTICLE 58- (1) Letters of guarantee may be accepted as collaterals and guarantee fund contributions until 31/12/2018. As of 01/01/2019, the current letters of guarantee shall no longer be considered as collaterals and guarantee fund contributions. Members are liable to change their letters of guarantee with one or more of the other collateral types within this period. Related principles and procedures are specified in the Procedure.

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

(3) Borsa İstanbul A.Ş. shares are considered as collateral while the buy-back guarantee of Borsa İstanbul remains.

(4) Additions to the assets accepted as collateral and revisions made to the composition limits of the assets accepted as collateral become effective after publication in the Procedure.

Enforcement

ARTICLE 59- (1) The Directive enters into force on the date of its publication.

(2) İstanbul Settlement and Custody Bank Inc. - Borsa İstanbul Inc. Equity Market Clearing &

Settlement and Collateral Management Directive is revoked as of the date of enforcement of this Directive.

Execution

ARTICLE 60-(1) The provisions of this Directive shall be executed by the Board of Directors.