DIRECTIVE ON CENTRAL **COUNTERPARTY SERVICE** TO BE PROVIDED BY ISTANBUL SETTLEMENT AND CUSTODY BANK **INCORPORATION TO BORSA ISTANBUL** INCORPORATION **FUTURES AND OPTIONS MARKET AND THE CLEARING AND** SETTLEMENT PRINCIPLES REGARDING THISSERVICE

CHAPTER ONE

General Provisions

ARTICLE 1- Purpose

The purpose of this Directive is to regulate the principles and procedures regarding the central counterparty service to be provided by Istanbul Settlement and Custody Bank Incorporation as the central clearing and settlement institution for Borsa Istanbul Futures and Options Market.

ARTICLE 2- Scope

This Directive covers the principles regarding membership, collateral, clearing and settlement, default, discipline, revenues and other issues related to central counterparty services to be provided by Istanbul Settlement and Custody Bank Incorporation as the central clearing and settlement institution of Borsa Istanbul Futures and Options Market.

ARTICLE 3- Basis

This Directive has been prepared on the basis of Article 77 and 78 of the Capital Markets Law No. 6362 published in the Official Gazette dated 30.12.2012 and numbered 28513, Istanbul Settlement and Custody Bank Incorporation Central Clearing and Settlement Regulation published in the Official Gazette dated 18.07.2013 and numbered 28711, and Istanbul Settlement and Custody Bank Incorporation Central Counterparty Regulation published in the Official Gazette dated 14.08.2013 and numbered 28735.

ARTICLE 4- Definitions and Abbreviations

- (1) Terms used in this Directive shall bear the following meanings;
- a) Open offer method: The method where Takasbank interposes itself between the market participants and becomes buyer against the seller and seller against the buyer at the time the transaction is matched.
 - b) Exchange: Borsa Istanbul Incorporation,
- c) Pre-Order Risk Management: The requirement of collateral adequacy by taking into account the matching probability of orders placed in the Exchange order system,
- ç) General Manager: The General Manager of Istanbul Settlement and Custody Bank Incorporation,
- d) General Regulation: The General Regulation on the Establishment and Operating Principles of the Central Clearing and Settlement Institutions published in the Official Gazette dated 30.05.2013 and numbered 28662.
- e) Trading Institution: The institution that has the authority to execute trade in the market but performs the settlement of the obligations relating to such transactions through a general central counterparty member,
- f) Trade Collateral: Collateral deposited to the depository or the transaction and depository accounts opened with Takasbank for the purpose of buying or selling Futures and Options Contracts in the Market.

- g) Law: Capital Markets Law No. 6362 published in the Official Gazette dated 30.12.2012 and numbered 28513,
 - ğ) Board: Capital Markets Board,
 - h) Central Counterparty Regulation: Istanbul Settlement and Custody Bank Incorporation Central Counterparty Regulation published in the Official Gazette dated 14.8.2013 and numbered 28735,
 - 1) CRA: The Central Registry Agency Incorporation,
- i) Central Clearing and Settlement Regulation: Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation published in the Official Gazette dated 18.7.2013 and numbered 28711,
- j) Option Contracts: Contracts that provide the right to buy or sell an economic and financial indicator, capital market instrument, asset, precious metal, or foreign currency of a pre-determined quantity, quality and price, at or up to a specified date in the future,
 - k) Market: Borsa Istanbul Incorporation Futures and Options Market,
- l) Procedure: The application principles that comprise the procedures related to the operation and practices in accordance with the rules and principles stipulated in the Directive and are approved by the General Manager,
- m) Derivative Instruments: Futures and options contracts and other derivative instruments traded on the market,
 - n) Clearing and settlement: All of the processes that enable the funds and/or assets to be transferred by Takasbank between the parties, where the Members fulfill the obligations arising in relation to the transactions executed in the Market, within the time period and on the conditions set by Takasbank by getting the opinion of the Exchange,
 - o) Takasbank: Istanbul Settlement and Custody Bank Incorporation,
 - ö) CBRT: The Central Bank of the Republic of Turkey,
- p) Member: Institutions that are confirmed by Takasbank to become a party to the rights and obligations arising from the transactions executed in the market as well as to the settlement of these rights and obligations.
- r) Futures Contracts: Contracts that give the obligation to buy or sell an asset, precious metal, economic and financial indicator, capital market instrument or foreign currency of a pre-determined quantity, quality and price, at a specified date in future,
- s) Directive: Directive on Central Counterparty Service to be Provided by Istanbul Settlement and Custody Bank Inc. to Borsa Istanbul Inc. Futures and Options Market and the Clearing and Settlement Principles Regarding This Service,
 - ş) Board of Directors: The Board of Directors of Takasbank.

CHAPTER TWO

Guidelines for Membership

ARTICLE 5- Membership

Investment institutions that are defined in the Law and satisfy the conditions prescribed in article 8 of the Directive may become a member of the central counterparty practice to be provided by Takasbank for the transactions executed in the Market provided that they are authorized by the Board of Directors.

ARTICLE 6- Membership types

(1) Members are divided into two groups: direct central counterparty member and general central counterparty member.

- (2) Direct central counterparty members are authorized to perform only the clearing and settlement transactions of themselves and/or of their clients.
- (3) General central counterparty members are authorized to perform the clearing and settlement transactions of other trading institutions in addition to the clearing and settlement transactions of themselves and/or of their clients.
- (4) The general and direct central counterparty membership classification is made by taking the amount of equity capital held by the Member, the adequacy of its internal systems and technical infrastructure into consideration as well as other internal rating, financial analysis and intelligence studies carried out by Takasbank.

ARTICLE 7 - Transition between membership types

- (1) The membership status of the general and direct central counterparty members may be changed by pursuing compliance of the members with the conditions set forth by Takasbank. In this context, a direct central counterparty member may be accepted later as a general central counterparty member or a general central counterparty member may also be accepted later as a direct central counterparty member.
- (2) General central counterparty members may make an application to become a direct central counterparty member. The applications filed by the general central counterparty members in this direction may be accepted by Takasbank provided that all rights, obligations and accounts, if any, relating to the trading institutions of whose clearing and settlement transactions executed are transferred or settled completely.
- (3) The applications for general clearing membership by the direct clearing members who meet the eligibility requirements for the general clearing membership shall be finalized by Takasbank in 2 months.
- (4) In case the members who lose the eligibility requirements for general central counterparty membership again fail to meet the relevant criteria within the time period set by the Board of Directors, they may be authorized as a direct central counterparty member from the date the loss of eligibility is notified to them by Takasbank provided that they satisfy the conditions set out in the first paragraph of article 8 of the Directive. In this case, the transfer or liquidation of all rights, obligations and accounts, if any, relating to the trading institutions whose clearing and settlement transactions are executed should have been completed. If there has been a failure to fulfill such obligation then, the provisions of article 13 of the Directive shall apply to the relevant Member.
- (5) In case of any transition between the membership types, the Board and the Exchange shall be notified within 1 day subsequent to the decision made for the said transition and the state of affairs shall be announced in Takasbank web site accordingly.

ARTICLE 8 - Membership conditions

- (1) In addition to the conditions set out in article 7 of the Central Counterparty Directive, the following conditions must also be met to become a direct central counterparty member:
- a) Holding the limited or general custody service license pursuant to the Communiqué on Principles Regarding Investment Services and Ancillary Services of the Board published in the Official Gazette dated 11.07.2013 and numbered 28704,
 - b) Being a member of the Market in the Exchange in accordance with the Exchange legislation,
- c) Banks to hold 50.000.000 TL and the brokerage houses to hold 10.000.000 TL as the minimum amount of equity capital,

- ç) Receiving at least D rating note as a result of the internal rating study conducted by Takasbank within the scope of third paragraph,
 - d) Signing of the Market Custody and Settlement Agreement,
- e) Submission of the declaration related to the data processing, risk management, internal control and internal audit systems, in a format suitable for the template set by Takasbank, and which has been approved by the Board of Directors of the Members wishing to trade at the Market,
- (2) In addition to the conditions listed in items (d) and (e) of the first paragraph, the following conditions must also be met to become a general central counterparty member:
- a) Holding the operating permit related to general custody service, which enables the member to provide the custody of positions and collateral arising from the transactions pursuant to the relevant legislation,
- b) Banks to hold 500.000.000 TL and the brokerage houses to hold 100.000.000 TL as the minimum amount of equity capital,
- c) Receiving at least B rating note as a result of the internal rating study conducted by Takasbank within the scope of third paragraph,
- (3) In the context of internal rating study conducted by Takasbank to determine the rating note of the company, the financial statements of such company, its activity report, company introductory information form, company key information form, its transaction volumes in the markets, custody balances denominated in TL, the latest status of accounts opened on customer basis, default and intelligence information concerning the company, and the credit ratings received from the rating agencies, if any, and the market intelligence information as well as the news featured in visual and printed media are used. Takasbank announces the general features of the parameters considered in its internal rating methodology as well as the effects of these parameters on the rating notes, on its web site.
- (4) Takasbank is authorized to determine the minimum criteria it would seek for technical infrastructure, data processing, risk management, internal control and internal audit systems with a procedure, to allot time for compliance to institutions who fail to meet the prescribed criteria, to get commitment and to check whether the criteria have been met.
- (5) The Board of Directors is authorized to increase the minimum amount of equity capital stated in item (c) of the first paragraph and in item (b) of the second paragraph or to decrease it up to its previous level thereof by the approval of the Board by taking the relevant capital markets and banking regulations as well as the market conditions into consideration.

ARTICLE 9- Membership application and commencement of operations

- (1) The institutions applying for membership are required to submit their application request addressed to the General Management of Takasbank together with a letter accompanied by the information and documents affirming the fulfillment of the prescribed requirements and to send the information and documents stated in article 10 of the Central Counterparty Regulation as well as the following documents appended as attachments to this letter thereof to Takasbank.
 - a) Membership application form,
 - b) Authorization certificate (copy),
- c) Document issued by the Exchange which verifies that the investment institutions applying for a direct central counterparty membership are actually operating in the Market,
 - ç) Membership Agreement and Pre-Agreement Information Form,
- d) Letter of Undertaking for Cash, Assets, Collateral, Real Time Gross Settlement Delivery versus Payment (RTGS DvP) and Electronic Funds Transfer (EFT) Instruction,
- e) Implementation Agreement Relating to the Customer Instructions to be delivered to Istanbul Settlement and Custody Bank Inc. via Fax Machine,

- f) Other documents that may be required by Takasbank in accordance with the relevant legislation.
- (2) For the membership applications to be eligible for assessment by Takasbank, the information and documents stated in the first paragraph of this article as well as other documents that may be requested by Takasbank must have been completed. The applications shall be assessed by Takasbank within 60 days following the submission of the application in an accurate and complete manner, in terms of whether the conditions specified in article 8 have been met or not. The final decision made by Takasbank on the application shall be notified to those concerned in writing with its justification in 2 months.
- (3) In order to commence its operations with Takasbank, the institution whose membership application is accepted, should;
 - a) Pay the membership entrance fee,
 - b) Deposit the membership collateral,
 - c) Pay the Guarantee Fund contribution amount, and
- ç) Authorize the personnel who will conduct the transactions on behalf of the Member in Takasbank system, within 1 month from the date the notice for the approval of its membership application was served. Otherwise, the membership right granted to the relevant institution shall be cancelled. The date on which such obligations are fulfilled shall be deemed to be the date that the institution has become a member of the central counterparty service provided to the Market, and the Member shall be entitled to execute transaction after this date accordingly. The Member who fails to fulfill the conditions stipulated in items (a), (b) and(c) of this paragraph cannot perform any account opening transaction.

ARTICLE 10 – General obligations of the members

- (1) The Members are obliged to comply with the following issues:
- a) Act in accordance with all rules and principles determined for the central counterparty service by this Directive and other relevant legislation,
- b) Act in accordance with the principles of honesty and good faith towards their customers and other Members,
 - c) Pay the guarantee fund contribution amounts stipulated by Takasbank,
- ç) Take all necessary measures to ensure the sustainability of internal control, risk management and internal audit mechanisms necessary to become a central counterparty member,
- d) In cases where the member accounts as well as their associated sub-accounts held with Takasbank are needed to be transferred and if the general central counterparty member who will take over these accounts has been determined beforehand; to include information about such matter in the framework agreements entered into by their customers,
- e) Act in accordance with all rules and principles stipulated in the Law and other relevant legislation related to the monitoring and custody of the customer assets and collaterals,
- f) Perform all dues, fees and commission payments and other liabilities requested by Takasbank in due time,
- g) Constitute continuous reconciliation between the single or multiple position and collateral accounts held with Takasbank and the records related to customer position and collaterals held with them.
- ğ) Ensure that their customers are informed in an accurate and complete manner about the structure of the accounts where the collaterals are monitored and the scope of segregation made by Takasbank as wells as the fact that the power of disposition on the collateral accounts opened with

Takasbank belongs to the Member and this power is restricted by Takasbank as to be limited only to the collateral required to be held,

- h) Deposit the collaterals of their customers to the relevant collateral accounts held with Takasbank,
- 1) Furnish all types of information and documents that may be requested on issues deemed necessary by Takasbank and the Board related to their business and transactions falling under the scope of this Directive, and provide all types of support in the investigations to be carried out by those authorized by Takasbank and the Board,
- i) Keep the records required by Takasbank, draw up the information and documents in due form; and convey them to Takasbank either periodically or when they are requested by Takasbank, and maintain such documents and records for a period of 2 years,
- j) Fulfill other obligations within the scope of 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 fulfill its obligations, then this Member is required to notify such situation immediately to the Board and Takasbank together with all substantiating information and documents describing its reasons thereof. Such notification shall not constitute an impediment for Takasbank to take the necessary measures stipulated in this Directive.

ARTICLE 11 - Responsibilities of the General Central Counterparty Members

- (1) The general central counterparty member executing the custody and settlement operations 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 central counterparty member executing the custody and settlement operations and the trading institution of whose custody and settlement operations are conducted by that member shall be jointly and severally liable towards Takasbank for the obligations arising from the trading institution's transactions of itself and of its customers that are executed through the relevant general central counterparty member.
- (2) A general central counterparty member shall be responsible for tracking whether the obligations set forth in article 12 have been actually fulfilled by the trading institutions whose custody and settlement operations are executed 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 central counterparty 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 in the Market are transferred to another general central counterparty member or winded-up.

ARTICLE 12– Responsibilities of the Trading Institutions

- (1) Positions and collaterals of the trading institutions are monitored in the exclusively opened sub-accounts connected to the general central counterparty members.
 - (2) The trading institutions shall be liable for complying with the following issues:
- a) Adhere to the arrangements under in this Directive related to the collateralization procedures and monitoring of the customer positions and collaterals held both with them and with the relevant general central counterparty member,
- b) Act in accordance with all rules and principles determined in the Law and other relevant regulations related to the monitoring and custody of customer assets and collaterals,

- c) Constitute a continuous reconciliation between the accounts of their customers held with the general central counterparty member to whom they are affiliated to and the records related to the customer positions and collaterals held with them,
- ç) Ensure that their customers are informed in an accurate and complete manner about the fact that the power of disposition on the collateral accounts of their customers opened with the general central counterparty member belongs to the relevant general central counterparty member and this power is restricted by Takasbank as to be limited only to the collateral required to be held,
- d) Furnish all types of information and documents that may be requested on issues deemed necessary by the relevant general central counterparty member, Takasbank and the Board related to their business and transactions within the scope of this Directive, and provide all types of support in the investigations to be carried out by those authorized by Takasbank and the Board.
- (3) If it is determined by the relevant general central counterparty member that a trading institution has failed to fulfill the obligations referred to in the second paragraph of this article either partially or completely, than this situation shall be notified immediately to Takasbank together with all information and documents substantiating non-fulfillment of such obligations; and all measures shall be taken to rectify these discrepancies thereof.
- (4) In cases where the relevant trading institution has failed to fulfill its obligations despite all measures taken by the general central counterparty member, the positions and collaterals of the customers of the trading institution, upon request of the relevant general central counterparty member to Takasbank, shall be transferred to the relevant general central counterparty member making the request in accordance with the agreement between each other. The trading institution shall provide the ownership information related to the transferred customer positions and collaterals to the Member who takes over them. The Board, the Exchange and the relevant public authority shall be notified by Takasbank within 1 business day about the transfer operation made by the relevant general central counterparty member together with its reasons thereof.
- (5) The provisions stipulated in other regulations for the trading institutions to which they are subject to shall be reserved.

ARTICLE 13- Restriction of the Members Market trading operations

- (1) Operations of the Members under this Directive may be restricted by Takasbank in the following situations.
- a) Restriction or temporary suspension of the Members' operations in the markets or capital market instruments where the clearing and settlement service is provided pursuant to article 13 of the Central Clearing and Settlement Regulation or article 14 of Central Counterparty Regulation;
- b) Failure to fulfill the obligations stipulated in the Directive, the Regulation and the membership agreement,
- c) Identification of any unfavorable situation such as protest, seizure, provisional injunction on the Member, temporary or permanent suspension of its activities, cancellation of its relevant operating permit, prohibition to execute transaction related to capital market instruments traded on the Market for any reason, decision rendered on its gradual liquidation or bankruptcy,
- ç) As a result of the intelligence, financial analysis and/or rating studies periodically conducted by Takasbank; determination of the fact that the credit worthiness of the Member is either diminished or does not exist.
- (2) The Members cannot execute transactions on accounts belonging to those who have been banned for trading by the Board or have similar limitations.
- (3) If any situation referred to in this article occurs, Takasbank may resolve the outstanding positions of the Member to be liquidated either partially or wholly in accordance with the provisions of article 41 of the Directive.

(4) If the Member's operations are restricted for reasons referred to in this article, this situation shall be immediately notified to the Exchange, the Board and the relevant public authority.

ARTICLE 14- Termination of the membership

Membership may be terminated in accordance with the relevant provisions of article 13 of the Central Clearing and Settlement Regulation and the provisions of article 15 of the Central Counterparty Regulation.

CHAPTER THREEAccount Operations

ARTICLE 15 - Account types

- (1) Three different types of accounts can be opened with Takasbank; "Trading Account", "Depository Account" and "Trading and Depository Account".
- (2) Trading Account is an account that the buying and selling transactions in the Market can be executed but no position and collateral monitoring can be conducted; and the orders and transactions are monitored on this type of accounts. A trading account opened with Takasbank can only be eligible to execute transaction in the Market upon the association of this account with a depository account and the approval of this operation by the Member to whom such depository account belongs. A trading account can be associated with only one depository account.
- (3) Depository Account is an account that the positions, the risks related to the positions and the collaterals can be monitored but no transaction can be conducted. A depository account can be associated with more than one trading account.
- (4) Trading and Depository Account is an account where the transactions can be executed and the positions, the risks related to the positions and the collaterals can also be monitored.

ARTICLE 16 - Opening of the Accounts

- (1) The accounts through which the transactions will be executed should be defined in Takasbank system.
- (2) In order for the relevant accounts to be established in Takasbank system, the identifying information of such account holders and other information should be defined with CRA in the first place. The relevant accounts shall be opened with Takasbank after the identifying information related to opened accounts is conveyed by CRA to Takasbank.
- (3) The trading institutions are required to open an account with the general central counterparty member for both their own portfolios and their customers on whose behalf they wish to execute transactions.

ARTICLE 17 – Segregation

(1) Two different types of accounts can be opened with Takasbank; a "Customer Account" and a "Portfolio Account". Customer Account is an account where the transactions executed by the Member with its customers are monitored. Portfolio Account, on the other hand, is an account where the transactions executed by the Member for its own portfolio are monitored. In the Market, the customer positions and collaterals are monitored separately from the Member's own portfolio and collaterals. The positions and collaterals belonging to the Member's own portfolio are monitored in a position account to be opened exclusively for the members along with related trading and collateral

account and collateral account. Each member is required to have a portfolio account. Among those members who are qualified as a market maker in accordance with the Exchange regulation can also open a market maker account. Market Maker Account is an account where the market makers monitor the transactions they conduct only for their own portfolio in accordance with the market making operations.

- (2) It is essential that the Members monitor the customer positions on single-position accounts to be opened in Takasbank system. The collaterals related to the customer positions monitored through single-position accounts can only be used to liquidate obligations of the respective customer.
- (3) Multiple-position (global) accounts can be opened as to be limited to the transactions conducted within the scope of the portfolio management activities. Opening of the multiple-position accounts can be restricted on a member basis. Collaterals deposited by the Member to the collateral accounts of such a nature that are associated with the multiple-position accounts by Takasbank shall be deemed to belong to the Member. Principles for opening accounts are specified in the Procedure.

ARTICLE 18 – Account Transfer

- (1) For the transfer of positions and collaterals, the principles and procedures specified in article 26 of the Central Counterparty Regulation shall be applied.
- (2) The transfer of all open positions and collaterals of an account owned by a customer with a Member to the account of that customer with another Member is called "account transfer". The account transfer operation is carried out over the records kept by Takasbank together with its relevant collateral accounts. Except for the transfer operations to be conducted within the scope of the third paragraph, the member is required to obtain the written consent of its relevant customer for the account transfer operations. Takasbank shall fulfill the account transfer requests by taking the consent of the member, whose accounts to be transferred, with the limit and position restrictions.
- (3) In case of transfer of the positions monitored through the accounts connected to the Member whose membership operations have been restricted or whose membership has been terminated, as well as of the collaterals related to such positions to another Member, the transfer operations shall be executed by Takasbank;
- a) Within the framework of the provisions of the agreement if the transferee Member has already been designated in the agreement made between the transferor Member and Takasbank,
- b) Within the framework of the provisions of the agreement if the transferor Member has made an agreement with the transferee Member until the date the transfer shall be conducted even though the transferee Member has not already been designated in the agreement made between the transferor Member and Takasbank,
- c) If a transferee Member can be found by Takasbank in the event no designation has been made according to the provisions specified in items (a) and (b) of this paragraph.
- (4) If the account transfer operations are executed on the basis of the third paragraph, than the collaterals held in the transferred accounts cannot be withdrawn until the reconciliation between the records kept with the membership restricted or terminated Member have been and the records kept with Takasbank is completed. The transfer of collaterals and positions held in the accounts connected to the members against whom a liquidation process is initiated by administrative and judicial authorities or the remaining collaterals belonging to their customers shall be paid or delivered to the competent authorities determined by the Law by also taking the regulations of the Board into consideration.
- (5) In cases where the Member's operations in the relevant market or capital market instruments are restricted or its membership is terminated, the collateral amount that can be transferred or returned from the associated customer accounts shall be limited to the remaining collateral amount subsequent to the variation margin amounts arising after default to be posted to the accounts.

(6) 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 transferred due to collateral deficit or have collateral deficit after the settlement of the positions, then the relevant accounts shall be liquidated in accordance with the principles set out in Chapter Five of the Central Counterparty Regulation. Any collateral remaining after the settlement of the positions in the accounts that cannot be transferred due to the unavailability of a Member to take them over shall be returned in accordance with article 27 of the Central Counterparty Regulation.

CHAPTER FOUR

Clearing and Settlement Principles

ARTICLE 19 - Takasbank's liability

- (1) Takasbank is the central counterparty with the open-offer method for the transactions executed in the Market. It undertakes to complete the settlement and clearing operations by acting as a buyer against the seller and as a seller against the buyer. Reserving the limitations stipulated in article 36 of the Central Counterparty Regulation thereof, Takasbank, as the central counterparty, assumes the clearing and settlement obligations arising from the transactions executed in 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, the liability of Takasbank against the parties of the transaction starts at the moment when the buy and sell orders are matched and ends with the finalization of the clearing and settlement. For the transactions being cancelled by the Exchange, the liability of Takasbank against the parties shall cease as of the moment the transaction is cancelled. If the limit that has been allocated by Takasbank to the Member on transaction basis in accordance with the fourth paragraph of article 5 of the Central Counterparty Regulation by taking the Member's internal and external ratings, its equity and information about its past trading volumes with the bank, into consideration is exceeded, than Takasbank shall not be liable for damages arising out of any transaction it has abstained from execution with the provisions in article 24 reserved thereof.
- (3) For the transactions conducted in the Market, Takasbank deals only with the Members. Takasbank shall not be liable for the obligations of the Members against their customers and of the general central counterparty members against the trading institutions.
- (4) For the fulfillment of liquidity needs and compensation of damages that may arise as a result of any default, the provisions specified in Chapter Five of the Central Counterparty Regulation shall be applied.

ARTICLE 20 – General principles of clearing and settlement

- (1) For all trades and transactions to be executed within the scope of the Central Clearing and Settlement Regulation, this Directive as well as the Procedure, Takasbank shall deal only with the relevant Member regardless of whether such transactions belong to the customers of the Members or not. In this way, the relevant Member shall be deemed fully authorized to take delivery of any type of notice and perform any type of transaction including the margin call on behalf of their customers. In this context, Takasbank shall be deemed fully authorized for any type of disposition on the customer accounts including ex-officio closing of the positions and converting non-cash collaterals to cash in order to resolve the default without the need for any further notification to the customers, if the obligation related to such accounts is failed to be fulfilled in due time despite the margin call made by Takasbank to the relevant Member for the customer transactions.
- (2) The open positions in the portfolio and customer accounts opened by the Members with Takasbank, the Guarantee Fund contribution amounts and the cash and non-cash collaterals are

updated by Takasbank. Takasbank may also perform the account updating operations more than once in a day.

- (3) For the clearing and settlement of the transactions executed in the Market, delivery against payment principle shall be applied with respect to the relation between the Member and Takasbank. The member shall be responsible for paying its debt arising from the margin call until the end of clearing and settlement period.
- (4) The transactions related to collateral deposit/withdrawal/valuation, account updating and fulfillment of the obligations shall be performed on account basis.
- (5) In case of the use of the futures and options contracts; the matching method, exchange of assets in physical deliveries and other issues shall be stipulated in the Procedure.

ARTICLE 21 - Periods related to the clearing and settlement operations

Clearing and settlement periods shall be stipulated in the Procedure by taking the opinion of the Exchange. The provision of the second paragraph of article 24 of the Central Clearing and Settlement Regulation shall be reserved.

ARTICLE 22 - Position limits

- (1) Three types of position limits can be used in the Market; "Registry-Based Position Limit", "Market-Based Position Limit" and "Member-Based Position Limit".
- (2) Registry-Based Position Limit refers to the maximum number of underlying assets which will correspond to the same directed positions that may be taken in all accounts associated with a single registry for all contracts written on the same underlying asset.
- (3) Market-Based Position Limit refers to the maximum number of underlying assets which corresponds to the aggregate of open positions in the market for all contracts written on the same underlying asset.
- (4) Member-Based Position Limit refers to the maximum number of underlying assets which corresponds to the positions in the same direction that may be taken in all accounts associated with a single member for all contracts written on the same underlying asset.
- (5) The amounts of the position limits, the issues to be considered in the limit calculations and the actions to be taken for the relevant accounts in case of limit exceed shall be stipulated in the Procedure by taking the opinion of the Exchange.

CHAPTER FIVE

Risk Management and Collateralization Principles

ARTICLE 23- Risk management

Market risk management is performed by Takasbank.

(2) Transactions executed in the market are received by Takasbank from the Exchange and turned into positions on a real-time basis. For the accounts whose positions are updated, the "initial margin" is calculated by using the final open position and the confidence level and holding periods to be determined in The Procedure according to the fixed or proportional or portfolio based collateralization method defined in the Procedure, as to have at least a 99.50% confidence level and 2 business days holding period. Takasbank may determine different margin rates and amounts on the basis of customers; provided, however, that such rates and amounts shall not be less than those mentioned above. Intra-day margin call (IDMC) may also be executed and principles of the IDMC level will be defined in the Procedure.

(3) In the Market, pre-order risk management is employed. The principles and procedures for the pre-order risk management shall be stipulated in the Procedure by taking the opinion of the Exchange.

ARTICLE 24 - Risk limits

- (1) Takasbank allocates specific risk limits to the Members based upon their financial capabilities. The risk limits are determined on the basis of the margin requirement values in relation to the risk limit calculations based on required collateral for the Members' positions held.
- (2) The risk limit allocated to each particular Member belongs exclusively to that Member and shall be notified to the relevant Member by Takasbank.
- (3) Whether the risk limit calculations based on required collateral as a result of margin calculations for the positions held by Member itself and its customers exceeds its risk limit or not; shall be controlled according to principles set out in the procedure.
- (4) When a Member exceeds its risk limit, the amount exceeding the limit shall be multiplied gradually by the coefficients specified in the Procedure and the total amount obtained thereof shall be fulfilled at the extra-margin accounts in which liabilities arising as a result of margin calculations are followed. Orders entry from all accounts of the Member who fails to provide the additional margin within the time specified in the Procedure shall be blocked.
- (5) If the member exceeds the ratio of collateral regarding risk limit calculations to its risk limits defined in Procedure as result of all positions taken by the Member for itself and its customers, all accounts of the Member shall be blocked to submit order regardless of whether the extra margin account collateral adequacy is sufficient. Order entry is allowed again if the ratio of "required collateral based on the risk limit calculations" to the "allocated risk limit to the member" falls below the level specified in the Procedure.
- (6) The additional transaction collateral to be calculated within the scope of this article shall be deposited by the Member choosing among the asset types mentioned in article 28 that could be used as collateral. The margin requirements must be covered by the assets owned by the Member or on which the Member has the power of disposition.

ARTICLE 25 - Calculating the profit or loss

Profit /loss calculations of the positions resulting from the transactions conducted in the Market are performed by Takasbank. The calculations are reported to the Members through clearing system. The principles for the calculation of profit or loss are specified in the Procedure.

MADDE 26 - Posting the profit or loss amounts to the accounts

- (1) The principles for posting profits, losses, premium receivables and payables to the accounts by Takasbank that result from the transactions executed in the Market shall be stipulated in the Procedure.
- (2) After session close, the end-of-day settlement prices for the futures and option contracts are determined and all accounts are updated. For the accounts whose total collateral amount fell below the required level, "a margin call" shall be issued by sending messages or making reporting to the customer screens provided by Takasbank in accordance with the principles stipulated in article 32. The deadlines for the fulfillment of the margin call obligations of the members are determined in the Procedure.

CHAPTER SIX

Principles Relating to the Collaterals

ARTICLE 27 – Membership collateral

- (1) The general central counterparty members and the direct central counterparty members shall deposit 10.000-TL and 5.000-TL, respectively, as membership collateral to cover the losses that may be incurred as a result of the failure to fulfill the obligations against Takasbank related to the dues, fees and commissions and other liabilities within their pre-determined time period. The aforementioned collateral amounts shall be re-determined by the Board of Directors by taking the current market developments into consideration. The membership collateral shall be deposited in Turkish Lira.
- (2) If the Members fail to fulfill their obligations against Takasbank, then Takasbank shall collect the relevant amounts from the membership collateral. The Member, after such collection, shall restore the membership collateral to its required level within 3 business days. If the collateral deficit is failed to be restored, this amount shall be collected ex officio from the Member.
- (3) In case of termination of the membership, the membership collateral shall be returned provided that all obligations of the Member against Takasbank are completely liquidated.

ARTICLE 28 - Assets accepted as eligible transaction collateral

- (1) The following assets can be used by the Members for the fulfillment of their margin requirements.
 - a) Cash in Turkish Lira,
 - b) Convertible Foreign Currency,
 - c) Government Domestic Debt Securities,
 - ç) Stocks traded in Equity Market of BIAS.
 - d) Equity umbrella fund shares
 - e) Debt instruments umbrella fund shares
- f) Lease certificates issued by the Undersecretariat of Treasury of the Republic of Turkey, Asset Leasing Company,
 - g) Gold in the standard traded on the Exchanges.
- (2) The principles and procedures for collateral deposit and withdrawal, transactions, and other issues shall be stipulated in the Procedure.
- (3) Takasbank may not accept securities or guarantees that are related to the member due to specific correlation that may exist between the credit worthiness of the member and the value of the assets it deposits as collateral, or may limit the acceptance of such assets and guarantee as collateral and guarantee fund contribution and guarantee fund contribution. Provisions for the implementation of guarantees for assets that are linked to the credit worthiness of the company are stipulated in the Procedure.
 - (4) Stocks to be accepted as collateral shall be stipulated in the Procedure.

(1) In the case of a new position is opened, at least 50% of the initial and variation margin should be comprised of cash collateral denominated in Turkish Lira. The Board of Directors is authorized to increase this rate according to the developments in the market. The ratios and composition limits specified in the following table shall be applied for the other assets than Turkish Lira cash to be accepted as collateral. Composition limits are applied over the sum of the deposited cash and non-cash collateral. Board of Directors is authorized to determine composition limits for new assets to be accepted as collateral or to change composition limits including those determined by this Directive.

| | | Sub-Group |
|----------------------|-------|-----------|
| Assets that could be | Group | Limit |
| accepted as | Limit | (% of |
| transaction | Limit | Group |
| collateral | | Limit) |
| Convertible Foreign | Max | - |
| Currency | %50 | |
| (USD/EUR) | | |
| Government | Max | %30 (ISIN |
| Domestic Debt | %50 | Based) |
| Securities | | |
| Stocks traded in | Max | %20 |
| Equity Market of | %25 | |
| the Exchange | | |
| Equity umbrella | Max | %50 |
| fund shares | %25 | |
| Debt instruments | Max | %50 |
| umbrella fund | %25 | |
| shares | | |
| Lease certificates | Max | %20 (ISIN |
| issued by the | %50 | Based) |
| Undersecretariat of | | |
| Treasury of the | | |
| Republic of Turkey, | | |
| Asset Leasing | | |
| Company | | |
| Gold in the standard | Max | - |
| form traded on the | %25 | |
| Exchanges | | |

- (2) The haircut coefficients to be used in the calculation of the collateral values of the assets to be deposited as collateral shall be defined in the Procedure. The valuation coefficients are regularly monitored, at least once a year. If necessary, the coefficients are updated more than once a year and members are notified.
- (3)Parametric, non-parametric or simulation-based statistical methods that are deemed appropriate by Takasbank are used in the calculation of valuation coefficients. In determining the collateral haircut coefficients, the credit risk, maturity, volatility in extreme market conditions, liquidity and currency risk of the related asset evaluated by Takasbank are taken into consideration.
- (4) The statistical confidence level to be used in the calculations cannot be less than 99.75%, and the holding period to be used cannot be less than 2 working days. It is the fact that the historical data to be used in calculations is not less than 1 year. Valuation coefficients for assets where there is not enough historical data are determined by comparing the coefficients calculated for assets with similar features.
- (5) Group limits to be determined in composition limit rules, are calculated on the total deposited collateral.. While calculating evaluated collateral after the sub-group limits, total evaluated value that the relevant group limit applied is taken into consideration.
- (6) Assets that are accepted as collateral are assessed with current market prices and evaluated by the prices determined by Takasbank at the risk calculation time, in the case of request for deposit and withdraw of collateral and also at the end of the each transaction day. Details on collateral evaluation are explained in the Procedure.

ARTICLE 30 - Collateral agreement

- (1) If the capital market instruments held in book-entry form are given as collateral, then a collateral agreement shall be made in writing pursuant to article 47 of the Law.
- (2) In the collateral agreements related to the capital market instruments held in book-entry form, the title transfer of collaterals to Takasbank can also be decided. If the title transfer of collaterals

to Takasbank is decided, Takasbank shall acquire the ownership right at the moment the agreement is executed and as a result of the transfer of such capital market instruments given as collateral in accordance with legal procedures.

- (3) In cases where the receivables of Takasbank are required to be covered from collaterals because of the reasons stipulated in the provisions of the agreement or of the relevant legislation or due to the default of the Member, then Takasbank shall be entitled to sell the asset provided as collateral in the exchanges or other organized market places, if such asset is listed in any of these markets, and cover its receivable from the sale proceeds thereof, without having any obligation to fulfill any precondition such as serving any notice or warning, allotting time, obtaining a permission or approval from the administrative or judicial authorities, converting collateral into cash through an auction or another way, etc. Takasbank shall also be entitled to set-off the value of the capital market instruments given as collateral from the liabilities of the debtor provided that the title of such collaterals has been transferred.
- (4) The rights arising from the assets held as collateral belong to the party supplying the collateral. However; if the title transfer of collaterals to Takasbank has been decided by the agreement made between Takasbank and the party supplying collateral pursuant to article 47 of the Law, then the rights arising from such collateral shall belong to Takasbank. Takasbank shall return the collateral on the maturity date together with their rights accrued thereof in accordance with the provisions of article 27 of the Central Counterparty Regulation and upon request of the Member; provided, however, that, all obligations are completely fulfilled.

ARTICLE 31- Collateral Management and Monitoring

- (1) In the Market, customer-based gross margining method is employed. For the positions of the individual accounts, portfolio-based net margining is applied. Collateral monitored in the accounts associated with single customer positions can be used neither for closing collateral deficit arising from the accounts belonging to the Member's own portfolio or other customer accounts nor for resolving the default.
- (2) Pursuant to article 79 of the Law, the rights and powers of Takasbank on the asset values taken as collateral for the Market operations that it executes as a central counterparty cannot be limited in any way. Lack of power of disposition of the Member, for any reason, on the asset values given as collateral shall not prevent Takasbank from real right acquisition in good faith. Title or limited real right claims of third parties on the asset values given as collateral cannot be raised against Takasbank.
- (3) Devoting time for composition with creditors about the party supplying collateral, approval of its composition, devoting time for composition after bankruptcy, inclusion of its assets by abandonment into the composition process, restructuring of its debts by an arrangement, its bankruptcy, postponement of its bankruptcy, or the relevant provisions of the Law regarding gradual liquidation or the proceeding procedures stipulated under the Execution and Bankruptcy Law No. 2004 cannot limit Takasbank's rights and powers on collaterals in any way.
- (4) The principles and procedures on deposit, withdrawal and substitution of assets that could be accepted as collateral and the time periods in respect thereof, shall be stipulated in the Procedure.

ARTICLE 32 - Margin call

- (1) When the collateral amount falls below the margin requirement level or the member has TRY cash deficiency, a margin call shall be made.
- (2) At the end of the account updating process; if the balance of any account exceeds the amount required to be held as collateral, then the balance exceeding the required amount can be withdrawn by the member.

- (3) The margin call shall be issued by sending messages or reports provided to members through Takasbank applications. If the margin call is sent through the system, the Member shall be deemed to have received the call without any further notice and information. The responsibility of the Member shall begin at the moment the margin call made by Takasbank is received by the Member.
- (4) The accounts that bear a margin call or are in default can only be taken out of margin call or default status either by depositing collateral or conducting transactions that would reduce the margin requirement value. Those accounts whose cash collateral account has a negative balance can only be taken out from the default status by depositing cash.

ARTICLE 33 - Accrual of interest on cash collateral

- (1) The amount of the membership collateral in cash Turkish Lira and the transaction collateral deposited by the Members remaining after the withholding of the amount to be maintained as compulsory reserve shall be given interest by Takasbank with the best possible conditions in accordance with the principles stipulated in the Procedure by taking the credit risk and liquidity positions into consideration. The interest accrual process shall be carried out within the limits of Takasbank.
- (2) Taxes and other legal liabilities and Takasbank's commission shall be deducted from the gross interest amount that has been earned through the accrual process.

CHAPTER SEVEN

Principles Regarding the Guarantee Fund

ARTICLE 34 - Guarantee Fund

- (1) Within the scope of the CCP service to be provided in the Market, Takasbank establishes a guarantee fund which is formed by the contributions of the members to be used for the amount exceeding the collaterals of the members who are liable for loss in case of default. It is obligatory for CCP Members to participate in the guarantee fund.
- (2) The guarantee fund contribution amounts of the CCP Members are composed of the guarantee fund contribution amounts that have been deposited and to be deposited when requested by Takasbank. If the Guarantee Fund is used within the framework of the provisions of the CCP Regulation, the Directive and the Procedure, Members of the CCP may be required to deposit additional contribution that does not exceed guarantee fund deposited. Members may be required to pay an additional contribution of up to four times during a period of one year from April 1 to March 31. The additional guarantee fund contribution that can be claimed at a time cannot exceed the amount of the guarantee fund contribution that must be paid for each member, calculated for the month in which the defaults occur. The additional guarantee fund contribution amount may be requested at once in total amount or more than once in tranches, provided that the amount deposited does not exceed the total amount deposited.
- 3) Maximum guarantee fund liability for CCP members which have requested termination of membership but whose request have not yet been approved by the Board of Directors or CCP members whose termination requests have been approved by the Board but who are assigned a period to return the guarantee fund contribution sum whose guarantee fun contribution is not subject to an ongoing default process during the date of the request is twice of that of the amount of the sum of the guarantee fund contribution that should be deposited as of the month the request is made. If there is an ongoing default process then the sum is triple of that amount. Takasbank may reject the membership requests by ex-members considered to have requested to cancel their memberships in order to evade possible guarantee fund liabilities.

- (4) It cannot be applied to the guarantee funds of the other members unless the defaulted member has insufficient margin collaterals, guarantee fund contributions, compensation from insurance policies, and capital allocation for covered risks in the market dedicated by Takasbank.
- (5) In the case of membership status is terminated, the guarantee fund contribution shall be refunded within the framework of Article 33 of the Central Counterparty Regulation.
 - (6) The assets in the Guarantee Fund cannot be used other than for their intended purpose.
- (7) It is a principle that the guarantee contributions to be deposited by members shall be met from the assets of their own property.
 - (8) Guarantee fund is represented and administered by Takasbank.

ARTICLE 35 - Size of the Guarantee Fund and the Contribution Amounts made by the Members $\,$

- (1) The size of the guarantee fund cannot be less than the greater of the funding requirement that may arise as a result of the default of the Member who has the highest margin requirement and of the joint default of the Members in stress scenarios who have the second and third highest margin requirement. This funding requirement is the portion remaining out of the Members' transaction collaterals for their risks calculated within these stress scenarios. Risks calculated in stress scenarios were estimated by statistical methods with 99,75% confidence level for 2 business days holding period and historical data not less than 5 years. Takasbank may set the minimum guarantee fund liability higher than the statistically calculated amount by considering market conditions, collateral concentrations and the adequacy level of resources for default management.
- (2) The sufficiency of the existing guarantee fund is tested by renewing calculation of the total size of the guarantee fund within a period not to be more than three months.
- (3) The contributions of the members to the guarantee fund is comprised of fixed portions and variable contributions calculated in proportion to the risk they bear.
- (4) The fixed amount contribution is determined on the level less than the average amount of the guarantee fund size per member and announced in the Procedure.
- (5) The variable contribution is calculated by considering the average amount of collateral that the Member must deposit for the market operations. It is announced via member screens.
- (6) The deposited guarantee fund contribution of a member cannot be less than the fixed portion.
- (7) The length of the data set to be used in the calculation of the size of the guarantee fund in total and in determining the average participation amount of member, which is the basis for the variable contribution of the members, is explained in the Procedure.
- (8) The Guarantee Fund contribution liabilities are calculated on the first business day of each month and are updated on the following business day. In the period determined in the procedure, the amount of the collateral evaluated for the guarantee fund contribution amount reflected to the accounts on Takasbank must be deposited. Default provisions apply for the amounts not deposited.
- (9) Members' guarantee fund contribution calculations can be made by Takasbank before the first business day of the month according to risk situation of the related members and market conditions.

ARTICLE 36 - Eligible Assets to be accepted as Guarantee Fund contribution amount

- (1) The Members can use the following assets as Guarantee Fund contribution amount.
- a) Cash in Turkish Lira,
- b)Convertible Foreign Currency,
- c) Government Domestic Debt Securities,

- c) Mutual Fund Participation Certificates.
- (2)The parametric, non-parametric or simulation based statistical methods that are deemed appropriate by Takasbank shall be used for the calculation of valuation haircuts to be applied to the guarantee fund contribution amounts. In the determination of the collateral valuation haircuts, the credit risk and maturity of the relevant asset being evaluated by Takasbank, its volatility in the extraordinary market conditions, its liquidity, and its currency risk, if any, shall be taken into consideration.
- (3)The statistical confidence level to be used in the calculations cannot be less than 99,75%, and the duration of liquidating cannot be less than 2 business days. It is the fact that the historical data to be used in haircut calculations is not less than 1 year.
- (4)The valuation haircuts are reviewed on a regular basis and in periods that are not longer than one year. The coefficients, if deemed necessary, may also be updated without waiting for the regular review period and announced to the Members accordingly.
- (5)The validity of the collateral valuation method being employed is also controlled by Takasbank internal system divisions, and audited at least once a year.
- (6)At least 30% of the total contribution amount required to be maintained must be in the form of cash Turkish Lira. The calculation of composition limit for non-cash collateral is made over the total deposited contribution.
- (7)The principles and procedures for deposit and withdrawal of the Guarantee Fund contribution amounts shall be stipulated in the Procedure.
- (8)Non cash assets that are used as Guarantee Fund contribution are valued with the current market prices and evaluated by the prices determined by Takasbank.
- (9)For the accounts that have a contribution deficit as a result of the end-of-day valuation, a call for contribution completion is made.
 - (10)Non-cash assets in the Guarantee Fund can be exchanged upon request of the Member.

ARTICLE 37 – Principles for the Use of Guarantee Fund

- (1) In default management; the non-cash contribution amounts in the guarantee fund belonging to the non-defaulting members shall be converted into cash when the funds that are available for use up to item (d) of the first paragraph of article 36 of the Central Counterparty Regulation fail to be sufficient and upon determination that the guarantee fund contribution amounts deposited in cash shall also be insufficient.
- (2) The contribution amounts deposited by the members who have joined to the guarantee fund after the occurrence of the relevant default or the contribution amounts deposited by the existing members against the risks they assumed after the occurrence of the default cannot be used.
- (3) In situations that necessitate the use of Guarantee Fund, any withdrawal of contribution amount from the guarantee fund shall not be allowed within the time period to be elapsed until the loss incurred has been fully reimbursed.
- (4) The use of contribution amounts starts with the most liquid assets; and the ability to quickly be converted into cash constitutes the basis. Cash amounts arising from the conversion of non-cash contribution amounts in the guarantee fund into cash but not used shall be returned pro-rata to the members whose non-cash contribution amounts have been used.
- (5) For the distribution of loss to the members being incurred to the guarantee fund, the shares of the members in the guarantee fund shall be taken as the basis.

- (6) The members are obliged to re-deposit, within 3 business days, their guarantee fund contribution amounts which have been deposited and used thereafter within the scope of the default management.
- (7) If the loss to be assumed by the guarantee fund seems likely to exceed 50% of the total fund size, the members may be asked to deposit additional contribution amounts that they have undertaken. The Members are obliged to deposit the additional contribution amounts within 5 business days after the request thereof. The requests for additional contribution amounts can also be made in tranches. The additional contribution amounts that are not used either partially or fully for resolving the relevant default shall be returned. If they, are returned in full without being used for resolving the default, then the request for additional guarantee fund contribution shall be deemed not to have been made.
- (8) The total contribution amount that may be requested from any Member in one month due to the default of another member cannot exceed the aggregate of the Member's deposited guarantee fund contribution amount obligation calculated for the respective month and its additional guarantee fund contribution amount obligation, if requested.
- (9) If the additional guarantee fund contribution amounts requested from the members due to the default are used either in part or in whole; then the members shall be asked to restore their guarantee fund obligation to the level being calculated pursuant to the article 34. The guarantee fund contribution amounts exceeding the maximum loss threshold that any Member would assume in the same month in case of default of another member shall be used only in the event of such Member's own default until the end of the month. Until the end of the one year period in which the guarantee fund contribution amounts to be claimed from the members fulfilling the maximum additional guarantee fund contribution obligation within the one year period from April 1 to March 31 are used only for their own defaults.

ARTICLE 38 - Accrual of Interest on cash contribution amounts in the guarantee fund

- (1) The remaining amount of the guarantee fund contribution in cash Turkish Lira deposited by the Members after deduction of the amount to be maintained as compulsory reserve shall be given interest by Takasbank with the best possible conditions by taking the credit risk and liquidity positions into consideration. The interest accrual process shall be carried out within the limits of Takasbank.
- (2) The accrued interest amount remaining after the deduction of the Banking and Insurance Transaction Tax (BITT), etc., legal costs and the commission to be collected over the gross interest amount by Takasbank at a rate to be suggested by Takasbank and deemed appropriate by the Board from the gross interest amounts earned as a result of the interest accrued on the balance of the guarantee fund cash contribution amounts remaining after the deduction of compulsory reserve shall be credited to the relevant accounts.

CHAPTER EIGHT

Principles Regarding Default Procedures

ARTICLE 39 – Default

- (1) If one of the following situations occurs, the relevant Member shall be deemed to have defaulted without any further notice.
- a) Failure to fulfill the margin call requirements arising after the account updating process performed by Takasbank for the open positions within the time periods specified in accordance with article 26;

- b) For contracts subject to physical delivery where the CCP service is not provided for the underlying spot market, failure to fulfill the settlement obligations within the time defined in Procedure:
- c) Failure to fulfill the obligation to restore both the deposited guarantee fund and additional guarantee fund contribution amounts within the time periods stipulated in the sixth and seventh paragraphs of article 37; or the obligation to restore the guarantee fund within its time periods in accordance with the ninth paragraph of article 37;
- ç) Pursuant to the item (b) of the first paragraph of article 13 of the Directive; the obligations of the Member are decided to be liquidated by Takasbank.
- (2) In case of any default; Takasbank shall not allow the defaulting Member to withdraw its collaterals in its respective accounts during the period until the obligation to be fulfilled.
- (3) Takasbank may grant time to the Member to terminate its default status, at most, until the end of the next business day of the date of default. The provisions of article 41 shall be applied to the Member who has failed to terminate its default status within the given time period.
- (4) For contracts subject to physical delivery where the underlying spot market with CCP service and positions are created in related markets and collateralized until the end of the physical delivery period. In the event of default, related underlying spot market's default management rules apply.

ARTICLE 40 – Default on Physical Delivery

- (1) With the limits stipulated by article 36 of the Central Counterparty Regulation being reserved; the responsibility of Takasbank for the physical delivery transactions shall be limited to the delivery of the asset subject to the physical delivery on the settlement date; and, in case of failure to deliver it on the settlement date, its return by supplying it from the market in accordance with the principles and procedures mentioned below; and in case of failure to return, then its cash consideration calculated again in accordance with the principles and procedures mentioned below and the default interest to be computed till the date of delivery or of the payment.
- (2) In the physical delivery, in case of the default of the member who is responsible for the delivery, the delivery of the asset subject to the physical delivery to the recipient member is essential. The right of the recipient of the physical delivery to claim the value of the assets shall be reserved.
- (3) Reserving the default provisions; the debtor of the physical delivery may be granted more time for the delivery of the asset it owes in accordance with the principles stipulated in the Procedure. Upon the collection of the asset debt either partially or fully, the physical delivery shall be delivered to the creditor within the same day. If the market value of the asset has been claimed in writing by the creditor of the physical delivery until the time period designated in the Procedure on the settlement date or the next business day thereof, a payment up to the amount corresponding to the undelivered portion shall be made on the next business day of the settlement date. In the calculation of the payment amount, the asset's valuation criteria to be determined in the Procedure and its calculated value shall be taken as the basis.
- (4) If no cash claim is made, then Takasbank shall use its best endeavors to supply the undelivered portion from the market in accordance with the principles related to the default management process specified in article 41. The transaction costs incurred by Takasbank during the supply of the asset from the market shall be collected from the membership collateral of the defaulting Member.
- (5) In case of failure to supply the asset within two business days after the settlement date, then the price of the undelivered portion shall be paid to the recipient of the physical delivery. In the calculation of the payment amount, price is calculated according to the valuation principles stated in Procedure.

- (6) For contracts subject to physical delivery where the underlying spot market with non CCP service, in case of any default in the physical delivery; a default interest shall be applied to the defaulting member within the scope of article 42. The remaining amount is paid, after the amount determined by Takasbank and the Takasbank commission approved by the Board is deducted from the amount calculated for the undelivered portion in accordance with article 42, to the recipient of the physical delivery for the time period to be lapsed for the complete fulfillment of the physical delivery or until the liquidation of the physical delivery debt by cash payment.
- (7) If the receivable of the recipient of the physical delivery is paid by Takasbank in cash, then the debt of the debtor of the physical delivery shall also be turned into cash. When the debt of the physical delivery is turned into cash, then the debtor of the physical delivery shall be liable to pay such cash amount together with its default interest to be calculated pursuant to article 42.
- (8) If Takasbank incurs any loss exceeding the default interest due to the non-payment of the debt either partially or fully, then such loss shall be indemnified by the defaulting Member.

ARTICLE 41 - Default management process

- (1) If the operations of the defaulting Member or its transactions falling under the scope of this Directive are decided to be terminated or restricted by Takasbank, then the member's power to make any type of disposition on its accounts shall be suspended; and a notification shall be effected in respect thereof to the Exchange, the Board and the relevant member.
- (2) The cancellation of the trading authorization of the defaulting Member and the relevant trading institution, if any, in the Market shall be requested from the Exchange.
- (3) Takasbank may take, but not limited to, one or more than one of the following measures against the defaulting Member in accordance with the relevant articles of the Central Counterparty Regulation:
- a) Upon request of the Member after the notice of default; closing of the positions held in the Member accounts without causing any liability for Takasbank and/or transferring them to a Member who has not defaulted either in part or in whole, together with the collaterals thereof, pursuant to article 26 of the Central Counterparty Regulation;
 - b) Closing of the positions, ex officio, by Takasbank either partially or fully;
- c) Liquidating the guarantee fund contribution amounts and the non-cash collaterals in the own portfolio of the defaulting Member and in the customer accounts associated with itself which have collateral deficit:
 - ç) Using the transaction collateral surplus of the Member in other markets;
- d) Using the guarantee fund contribution amounts of the Member in other markets, provided that it has no risk in the relevant market;
- e) Acting in accordance with article 38 for the use of guarantee funs contribution amounts belonging to non-defaulting Members;
 - f) Entering into hedging transactions to diminish risks that may arise from the open positions.
- (4) Takasbank may organize a tender to close the open positions. The tender can be cancelled by Takasbank either in full or on portfolio or position basis. Participation to the tender is open to all Members and also to the customers through the Members, however; it is mandatory for the general central counterparty members. If all positions cannot be transferred as a result of the tenders to be opened, or if the tender is cancelled; then the remaining positions may be transferred compulsorily to the members by Takasbank. Certain factors, such as the risk limits of the members, the position amounts they took over in the tenders and the existence of the counter-positions of the positions to be taken over shall be taken into consideration for the determination of the members to whom the compulsorily transfer shall be made;
- (5) In case of existence of the conditions referred to in article 48 of the Central Counterparty Regulation, Takasbank, without closing of the open positions, may make deductions from the profit

distributions arising as a result of the account updating process, in order to allocate the losses originating from the defaulting Member.

- (6) Despite all efforts for the fulfillment of all obligations resulting from the open positions of the defaulting Member and the risk reduction thereof, if it is determined that the risk generating positions cannot be completely closed, such positions may be liquidated by cash settlement either partially or fully. Pursuant to the third paragraph of article 36 of the Central Counterparty Regulation; the prices of the counter-positions related to the positions to be liquidated shall be determined by taking the loss amount to be assumed by Takasbank into consideration.
- (7) Deficits arising after the execution of the default provisions of the Procedure and the Chapter Five of the Central Counterparty Regulation on the defaulting member and cannot be covered by the collateral and the guarantee fund contribution amounts of the defaulting Member by Takasbank shall be designated as the loss of Takasbank and of other Members and shall be assumed thereof in order as stipulated in the first paragraph of article 36 of the Central Counterparty Regulation. The collections to be made from the defaulting Member later on shall be distributed pursuant to the fifth paragraph of article 36 of the Central Counterparty Regulation.
- (8) If the capital that has been allocated in accordance with article 36 of the Central Counterparty Regulation against the risks being covered is used due to a default, then Takasbank shall restore the used amount within a month. The allocated capital amount to be restored in this way during one year period cannot exceed the amount determined in the beginning of the period. If a default reoccurs within the period of one month to be lapsed until the restoration of the used capital, then the remaining portion of the allocated capital, if any, shall be used. The guarantee fund of the non-defaulting Members shall be used for the portion which cannot be covered. Restoration of the capital shall not necessitate the return of the guarantee fund contribution amounts being used.

ARTICLE 42 - Default rate

- (1) If the Member, who has been defaulted by not paying its clearing and settlement, collateral and guarantee fund contribution amount requirements within predefined time periods, fulfills its obligation on the settlement date within the time period from the default's start time determined in the Procedure to EFT closing time, then a default interest calculated at the rate of 50% of the highest among the weighted average overnight interest rates occurred in the repo-reverse repo markets that have been formed by the Exchange and where government securities are traded, CBRT Interbank Money Market or Takasbank Money Market, shall be applied on the default amount. For the default amounts that have been closed on the settlement date after EFT closing time, a default interest at the rate of the double of the highest of the aforementioned shall be applied.
- (2) For contracts subject to physical delivery where the underlying spot market with non CCP service, the Member, who has been defaulted as a result of the these contracts, shall be charged a default interest over the value of the asset on the settlement date for the time period lapsing from the settlement date to EFT closing time, to be calculated at the rate of 50% of the highest among the weighted average overnight interest rates occurred in the repo-reverse repo markets where government securities are traded, CBRT Interbank Money Market or Takasbank Money Market, that have been formed by the Exchange. For the default amounts that have been closed on the settlement date after EFT closing time, a default interest at the rate of the double of the highest of the foregoing shall be applied.
- (3) If the defaulting Member is granted more time to end the default, the moment of default shall be taken into account in the calculation of the default interest.
- (4) In case of the default of the Member, Takasbank shall inform the electronically calculated default interest to the Member on the next business day of the fulfillment of the guarantee fund and additional guarantee fund contribution amount, the margin call requirement or the physical delivery obligation with default. The default interest shall be calculated in Turkish Lira also for the foreign

currency liabilities. For the conversion of the relevant foreign currency to the Turkish Lira, the foreign currency buying rates announced by the CBRT shall be used. The minimum default interest amount shall be stipulated in the Procedure.

(5) The default interest shall be paid within one business day, at the latest, after its accrual date. If the default interest is failed to be paid within this time period, then such amount shall be collected ex officio from the free current account of the Member with Takasbank. If this account does not have sufficient cash, the membership collateral of the Member; and if the membership collateral is again not sufficient, the transaction collateral of the Member for its portfolio account shall be used respectively. Takasbank shall have the rights to settle, offset and retention on all assets, rights and receivables of the Member with itself.

ARTICLE 43 - Currency

- (1) For the payment of the cash liabilities arising from the clearing and settlement operations, the use of the currency in which the trade is conducted shall be essential.
- (2) Takasbank may allow the settlement of cash clearing and settlement liabilities to be performed by the use of different currencies other than the currency in which the transaction was conducted.

CHAPTER NINE

Miscellaneous Provisions

ARTICLE 44 - Fees and commissions

(1) For the fees and commissions to be charged by Takasbank from its Members in relation to the services it provides within the scope of this Directive, the provisions of article 50 of the Central Counterparty Regulation shall be applied.

ARTICLE 45 - Disciplinary provisions

The disciplinary provisions stipulated in the Chapter Seven of the Central Clearing and Settlement Regulation shall apply to the Members who fail to comply with the obligations stipulated in the Directive.

ARTICLE 46 - Measures to be taken in extraordinary situations

Takasbank shall be authorized to determine the measures to be taken in case of the occurrence of extraordinary situations where it foresees the clearing and settlement operations in the Market may be adversely affected, and to execute these measures accordingly. In such cases, Takasbank shall also be authorized to take the measures specified in the second and third paragraph of article 48 of the Central Counterparty Regulation.

ARTICLE 47 – Provisions to be applied in cases where the Directive contains no provision

(1) The provisions of the Central Counterparty Regulation and of the Central Clearing and Settlement Regulation shall apply in cases where the Directive contains no provision.

(2) In the event of any conflict between the provisions of this Directive and the provisions of the Central Counterparty Regulation and of the Central Clearing and Settlement Regulation, the provisions of the relevant regulation shall apply.

ARTICLE 1 – Temporary Provisions

- (1) The risk limit principals in Article 24 of this Directive shall enter into force on the date announced by the Takasbank.
- (2) As of the date when CCP service begins to be provided by Takasbank on the Exchange Equity Market, settlement is guaranteed for physically delivered equity contracts. Until then, the principles related to the Exchange Equity Market shall be applied as the principles of default and compensations related to the physical delivery of underlying stocks.

ARTICLE 48 – Enforcement

The Directive shall enter into force effective from Takasbank announcement being subsequent to its adoption by the Board.

ARTICLE 49 – Execution

The provisions of this Directive shall be executed by the Board of Directors.