

İSTANBUL TAKAS VE SAKLAMA BANKASI A.Ş.
BORSA İSTANBUL A.Ş. SWAP MARKET PROCEDURE ON CLEARING AND SETTLEMENT AND CENTRAL COUNTERPARTY SERVICE PRINCIPLES

List of the Procedure amendments:

1. Published by the General Letter numbered 1741, dated December 14, 2022
2. Published by the General Letter numbered 1758, dated January 05, 2022
3. Published by the General Letter numbered 1783, dated March 17, 2022
4. Published by the General Letter numbered 1862, dated February 21, 2023
5. Published by the General Letter numbered 1889, dated June 19, 2023
6. Published by the General Letter numbered 1896, dated July 27, 2023
7. Published by the General Letter numbered 1910, dated September 29, 2023
8. Published by the General Letter numbered 1920, dated October 31, 2023
9. Published by the General Letter numbered 1949, dated January 22, 2024
10. Published by the General Letter numbered 1977, dated June 05, 2024
11. Published by the General Letter numbered 2027, dated December 30, 2024
12. Published by the General Letter numbered 2049, dated February 14, 2025
13. Published by the General Letter numbered 2128, dated February 26, 2026
14. Published by the General Letter numbered 2155, dated July 09, 2026
15. Published by the General Letter numbered 2159, dated July 24, 2026

CHAPTER ONE
General Provisions

Purpose

ARTICLE 1 - (1) The purpose of this Procedure is to stipulate the principles and procedures regarding membership, risk management and collateral, clearing and settlement, default, discipline, revenues and other issues related with the central counterparty service to be provided in Borsa İstanbul Swap Market by İstanbul Takas ve Saklama Bankası A.Ş. as the central clearing and settlement institution.

Scope

ARTICLE 2 - (1) This Procedure covers the matters regarding membership, risk management and collateral, clearing and settlement, default, discipline, revenues and other issues related to central counterparty services to be provided by İstanbul Takas ve Saklama Bankası A.Ş. as the central clearing and settlement institution in Borsa İstanbul Swap Market.

Basis

ARTICLE 3 - (1) This Procedure has been issued in accordance with articles 77 and 78 of the Capital Markets Law No. 6362 published in the Official Gazette no. 28513 dated 30.12.2012, article 10 of the Law on Payment and Securities Settlement Systems, Payment Services and Electronic Money Institutions published in the Official Gazette no. 28690 dated 27/06/2013 and İstanbul Takas ve Saklama Bankası A.Ş. Central Clearing and Settlement Regulation published in the Official Gazette no. 28711 dated 18/07/2013, İstanbul Takas ve Saklama Bankası A.Ş. Central Counterparty Regulation published in the Official Gazette no. 28735 dated 14/08/2013, the Regulation on Activities of Payment and Securities Settlement Systems published in the Official Gazette no. 29044 dated 28/06/2014 and İstanbul Takas ve

Saklama Bankası A.Ş. Directives on Collateral, Risk, and Default Management Related with Markets where İstanbul Takas ve Saklama Bankası A.Ş. Provides Central Counterparty Service and Clearing and Settlement Related with Markets where İstanbul Takas ve Saklama Bankası A.Ş. Provides Central Counterparty Service.

Definitions and Abbreviations

ARTICLE 4 - (1) The following terms used in this Procedure shall have 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) **Unit Collateral Value:** The collateral amount required to be made available for per unit of asset independently from the contract size and the portfolio-based collateralization effect.
- c) **Exchange/BIAS:** Borsa İstanbul Incorporation.
- ç) **Multiple Position Account:** The accounts opened at Takasbank in the name of the CCP members, where positions of the members' proprietary portfolio or of their customers are collectively monitored but where, in any event, the own positions of the CCP member and the positions of its customers are segregated.
- d) **Appreciated Collateral:** The amount of the total deposited collateral being calculated by the application of margin valuation haircuts, group limits and sub-group limits.
- e) **Variation Margin:** TL-denominated value of the debt or receivable amount being calculated at the end of each day to neutralize the internal value of the swap transaction conducted in the Market
- f) **GDDS:** The government domestic debt securities.
- g) **EFT:** The Electronic Fund Transfer System.
- ğ) **Funding Cost:** The amount calculated over the interest rate determined by Takasbank, which must be paid to the party paying the variation margin by the party receiving the relevant variation margin.
- h) **General Manager:** The General Manager of İstanbul Takas ve Saklama Bankası A.Ş.
- ı) **General Regulation:** The General Regulation on the Establishment and Operating Principles of the Central Clearing and Settlement Institutions published in the Official Gazette no. 28662 dated 30/05/2013.
- i) **Intra-day Risk Calculation:** Risk and collateral valuations made by using the last balances and prices of collateral and positions determined during the day.
- j) **Law:** The Capital Markets Law No. 6362 published in the Official Gazette no. 28513 dated 30/12/2012.
- k) **Precious Metal:** Precious metals defined in resolution 32 and whose standards are determined,
- l) **Board:** The Capital Markets Board.
- m) **CCP:** The Central Counterparty.
- n) **Central Counterparty Regulation:** İstanbul Takas ve Saklama Bankası A.Ş. Central Counterparty Regulation published in the Official Gazette no. 28735 dated 14.08.2013.
- o) **Central Clearing and Settlement Regulation:** İstanbul Takas ve Saklama Bankası A.Ş. Central Clearing and Settlement Regulation published in the Official Gazette no. 28711 dated 18.07.2013.

- ö) **Market:** Borsa İstanbul Inc. Swap Market.
- p) **Position:** Settlement debt and receivables arising in relation to the transactions conducted in the Market.
- r) **Portfolio-based Collateralization:** Calculation of the collateral amounts to be received by Takasbank from the CCP members by considering the risk mitigating effects of the correlations between the assets in the same account.
- s) **Procedure:** The implementing principles containing the procedures for operation and practices in accordance with the rules and principles stipulated in the Procedure, which have been approved by the General Manager.
- ş) **System:** Takasbank system established for clearing and settlement of the transactions being conducted in BIAS Swap Market.
- t) **SWIFT (Society for Worldwide Interbank Financial Telecommunication):** The international financial telecommunication network and messaging infrastructure.
- u) **Clearing and Settlement:** All of the processes that facilitate cash transfer between the parties through fulfillment by the Members, within the time period and on the conditions set by Takasbank, of the obligations arising in relation to the transactions conducted in the Market and in accordance with the collateral being deposited.
- ü) **Takasbank:** İstanbul Takas ve Saklama Bankası A.Ş. operating at Reşitpaşa Mahallesi, Borsa İstanbul Caddesi, No: 4 Emirgan, Sarıyer, 34467 İstanbul/Turkey.
- v) **Margin Accounts:** The accounts opened at Takasbank in the name of the CCP members, in which the collateral required to be maintained by the members due to the positions of their portfolio or of their customers is monitored.
- y) **Collateral Received for Clearing and Settlement:** The amount collected from the members for the securities to which CCP service is not provided, in an effort to not to get affected from the risk of any price change of such securities subject to default during the time period elapsed from the occurrence of an event of default to its resolution,
- z) **CBRT :** The Central Bank of the Republic of Turkey,
- aa) **TIC:** The free cash accounts of the banks at the CBRT.
- bb) **Member:** The CCP members authorized, pursuant to article 6 of the Central Counterparty Regulation, to become a party to the clearing and settlement services provided by Takasbank as the central counterparty in the Market.
- cc) **Investment Institution:** The brokerage houses that have received permission from the Board to engage in investment services and activities and other capital market institutions whose establishment and operating principles are determined by the Board to engage in investment services and activities, and the banks,

Market Directives: Directives on Collateral, Risk, and Default Management Related with Markets where İstanbul Takas ve Saklama Bankası A.Ş. Provides Central Counterparty Service and Clearing and Settlement Related with Markets where İstanbul Takas ve Saklama Bankası A.Ş. Provides Central Counterparty Service.

- a) **Board of Directors:** The Board of Directors of Takasbank.

CHAPTER TWO

Principles for Membership

Membership

ARTICLE 5 - (1) The investment institutions meeting the requirements in article 8 of the Directive on Clearing and Settlement Related with Markets where İstanbul Takas ve Saklama Bankası A.Ş. Provides Central Counterparty Service and the other institutions authorized by Borsa İstanbul to trade in the market may become a member to the CCP service to be provided by Takasbank on the System for the transactions conducted in the Market provided that they are authorized by the Board of Directors.

(2) The members trading in the Market are considered as a Direct CCP Member.

(3) CBRT is a special status participant in the system, and is the natural member of the CCP service to be provided by Takasbank for the transactions conducted in the Market, without requiring any application and assessment.

CCP Membership conditions

ARTICLE 6 - (1) The determination and assessment of the fulfillment of membership requirements belong to Takasbank, and as a minimum, the following conditions must have been met for membership:

- a) The conditions for membership of the Central Clearing and Settlement Regulation must have been met.
- b) The trading authorization in the Market must not have been revoked due to any opposition to the legislation.
- c) The CCP service-related agreements and/or letters of undertaking whose content is determined by Takasbank must have been signed and submitted to Takasbank.
- ç) Their financial structure must be at a level to fulfill their commitments towards Takasbank.
- d) Other information and documents to be requested by Takasbank must have been submitted.
- e) The declaration in the format compatible with the template set by Takasbank for their data processing, risk management, internal control and internal audit systems must have been approved by the Board of Directors of the Members and submitted.
- f) The relevant accounts at Takasbank and the correspondent banks must have been opened.
- g) For the brokerage houses to become a direct CCP Member;
 - i. They must have a limited or general custody service authorization pursuant to the relevant legislation.
 - ii. They must have an equity capital of 100.000.000 TL
 - iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank
- ğ) For the banks to become a direct CCP Member;
 - i. They must have a limited or general custody service authorization pursuant to the relevant legislation.
 - ii. They must have an equity capital of 200.000.000 TL
 - iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank.

(2) As part of the internal rating study conducted by Takasbank to determine the credit rating of the company, the financial statements of such company, its activity report, company introductory information form, company key information form, its trading volumes in the markets, TL custody balances, default and intelligence information, and the credit ratings received from the rating agencies, if any, and the

market intelligence information and the news featured in visual and printed media are used. In its web site, Takasbank announces the parameters it has applied in the internal rating methodology it adopts and the impact of these parameters on the credit ratings.

(3) Takasbank is authorized to determine the minimum criteria it would seek for technical infrastructure, data processing, risk management, internal control and internal audit systems, allot time for compliance to the institutions failing to meet the criteria being sought, get commitment and check whether or not such criteria have been met.

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

Membership application and admission

ARTICLE 7 - (1) The institutions to be applied for membership are required to submit their application request addressed to the Takasbank Head Office together with a letter accompanied by the information and documents affirming the fulfillment of the conditions prescribed for membership in this Procedure and send the information and documents referred to in article 10 of the Central Counterparty Regulation as well as the following documents by appending them to the said letter to Takasbank. The institutions being a member to BİS Debt Securities Market are only required to fulfill the obligations referred to in the item (ç) among the following obligations given in this paragraph.

- a) Membership application form.
- b) Authorization certificate.
- c) Borsa İstanbul Swap Market Central Counterparty and Clearing and Settlement Operations Participant Agreement and Pre-Agreement Information Form.
- ç) Letter of Undertaking for Cash, Assets, Collateral, Conditional Remittance and Electronic Funds Transfer (EFT) Instruction.
- d) Implementation Agreement for the Customer Instructions to be sent to İstanbul Takas ve Saklama Bankası A.Ş. via Fax Machine.
- e) Other documents to be requested by Takasbank in accordance with the relevant legislation.

(2) In order for the membership applications to be eligible for assessment by Takasbank, the information and documents referred to in the first paragraph of this article as well as other documents to be requested by Takasbank must have been completed. The filed applications shall be reviewed by Takasbank in terms of whether the conditions laid down in article 6 have been met or not. The decision made by Takasbank on the application shall be notified to those concerned within 2 months in writing.

(3) In order to commence its operations with Takasbank, the institution whose membership application is accepted must, within 1 month from the notification that its membership application has been found eligible;

- a) Deposit the membership admission fee,
- b) Deposit its membership collateral,
- c) Deposit its Guarantee Fund contribution,
- ç) Authorize the personnel who will trade on behalf of the Member in Takasbank system.

(4) Otherwise the membership permission given to the relevant institution shall be revoked. The date on which such obligations have been fulfilled shall be deemed the date on which the institution has become a member to the central counterparty service provided in the Market and the Member shall become entitled to trade from that date.

(5) The institutions that have been deposited BIAS Debt Securities Market membership collateral shall be exempt from the membership collateral. However, the institutions which are not a member to the Debt Securities Market and have not deposited the membership collateral shall be obliged to deposit related collateral.

General obligations of the members

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

- a) Act in accordance with all rules and principles stipulated by this Procedure and other relevant legislation for the market clearing and settlement transactions and the central counterparty service.
- b) Behave in accordance with the principles of honesty and good faith towards their customers and other members.
- c) Deposit the guarantee fund contributions stipulated by Takasbank.
- ç) Take all necessary measures to ensure sustainability of the internal control, risk management and internal audit mechanisms required to become a CCP member.
- d) Cover the collateral to be deposited for the portfolio accounts entirely from the assets under their possession.
- e) Inform their customers of the fact that the positions of other customers are also monitored in the position accounts held under the member, the collateral associated with such accounts shall be used for the total risk arising from the multiple position account and it is acknowledged by Takasbank that collateral associated with these accounts belong to the member.
- f) Cover the collateral to be deposited for the positions of their customers from their own collateral or from those on which they have gained the right of disposition through the transfer of ownership agreements compatible with the Law.
- g) If the collateral deposited for the customer positions have been obtained from the customers or other persons and entities through transfer of ownership agreements, establish a sound recording and monitoring system which would ensure safekeeping of transfer of ownership agreements and matching of the customers, persons and entities from which the collateral have been obtained with the collateral deposited in the relevant position accounts.
- ğ) Act in accordance with all rules and principles stipulated in the Law and other relevant regulations related to the monitoring and safekeeping of customer assets and collateral.
- h) Fulfil the dues, fees, commissions and other obligations requested by Takasbank within their time period.
- ı) Adapt to the system revisions to be made by Takasbank within the prescribed time periods and participate in the tests.
- i) Establish constant reconciliation between the position and collateral accounts at Takasbank and the records of the portfolio and customer accounts at itself.
- j) Deposit the collateral and the guarantee fund contributions to the relevant margin accounts at Takasbank.
- k) Furnish any information and document to be requested on issues deemed necessary by Takasbank and the Board in relation to their business and transactions within the scope of this Procedure, and provide all type of support in the investigations to be carried out by those commissioned by Takasbank and the Board.

- l) In addition to the books and records they are required to keep legally, keep other records determined by Takasbank, issue the information and documents in due form; and convey them to Takasbank in a periodic manner or at times requested by Takasbank, and maintain such documents and records for a period of 1 years.
- m) Make notification to Takasbank within 15 days in case of transfer of the shares providing direct or indirect management control.
- n) Inform Takasbank of any change in the head office address, Members of the Board of Directors and the General Manager at the latest on the business day following the date on which the change has occurred.
- o) Fulfill other obligations under this Procedure in a complete manner and within their time period.

(2) If any Member foresees that it will be unable to either partially or wholly fulfill its obligations, this Member is obliged to notify such situation immediately to the Board and other relevant public entity and institutions 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 Procedure.

(3) The members are responsible for the fulfillment of all obligations relating to the transactions they have conducted in accordance with the activities stipulated under the Procedure and for any function performed by their employees pursuant to their duties.

(4) The members conduct their transactions via remote access by using the user codes and passwords allocated to the personnel they have authorized. The responsibility arising from the transactions conducted in the system by using the allocated password and from the use of the password by unauthorized people shall belong to the member.

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

Restricting the member activities

ARTICLE 9 - (1) The activities of the members under this Procedure may be restricted by Takasbank in the following situations.

- a) Removal of membership or suspension of operations in the markets or capital market instruments in which the clearing and settlement service is provided, pursuant to article 13 of the Central Clearing and Settlement Regulation or article 14 of Central Counterparty Regulation.
- b) Failure to fulfill the obligations stipulated in the Market Directives, the Procedure and the membership agreement.
- c) Identification of any unfavorable situation for the member such as protest, seizure, provisional injunction, etc., or temporary or permanent suspension of its operations, cancellation of its relevant operating permit, prohibition to conduct any transaction for the capital market instruments traded in any market at BIAS for any reason, decision rendered on its gradual liquidation or bankruptcy or receipt of any negative intelligence about it.
- ç) Determination of the fact that the credit worthiness of the Member is either impaired or does not exist as a result of the intelligence, financial analysis and/or rating study periodically conducted by Takasbank.

- (2) The Members cannot trade on the accounts belonging to those who have been banned from trading by the Board and have similar limitations thereof.
- (3) If any situation referred to in this article occurs, Takasbank may resolve the outstanding positions of the Member to be liquidated either in part or in whole.
- (4) If the Member's activities are restricted for reasons referred to in this article, the situation shall be notified to the Exchange, the Board and the relevant public authority.
- (5) Takasbank is authorized to take all types of measures it deems necessary, including those given below, for completing the clearing and settlement transactions of the institution whose activities are suspended or who is removed from the membership.
 - a) Restraining the member from trading directly on its accounts at Takasbank.
 - b) Using the settlement receivables of the member to close its settlement debts.
 - c) Resorting to the member's assets held in its free accounts at Takasbank.

Terminating the membership

ARTICLE 10 - (1) The CCP membership may be terminated by the Board of Directors' decision in the event of the following situations;

- a) Determination by Takasbank that any one of the CCP membership conditions set forth in this Procedure and other relevant regulations has been lost.
 - b) Identification by Takasbank that risks of significant nature that would jeopardize the secure and uninterrupted functioning of the CCP system have arisen due to failure to fulfill the obligations stipulated in this Procedure or other relevant regulations.
 - c) Failure of the CCP members whose activities have been restricted in accordance with the provisions of the second paragraph of article 14 of the CCP Regulation to fulfil their relevant obligations within the six months' period granted to them pursuant to the sixth paragraph of the same article.
 - ç) Upon the CCP member's own request.
- (2) Those intending to terminate their CCP membership in accordance with the item (ç) of the first paragraph of this article shall notify Takasbank of the situation in writing. However, the relevant member intending to terminate its CCP membership must have fulfilled all of its obligations under the Procedure and other relevant regulations. In such cases, the Board of Directors may consent the termination of the CCP membership. If the request for termination of the membership is submitted without fulfilling all obligations under the Procedure and other regulations, the member shall be given a period of 30 days for fulfilling such obligations. The member that fulfills such obligations within the period of time granted shall notify Takasbank of such case in writing, and the request for termination by the member shall be addressed at the next meeting of the Board of Directors following such notification. Members who fail to fulfill such obligations within a period of 30 days may only apply for terminating their membership once they have closed all their positions.
- (3) Takasbank receives the opinion of the Exchange in terminating the membership of a CCP member.
 - (4) Even in the case of termination of the CCP membership, the obligations of such institution against Takasbank under this Procedure and other relevant regulations in relation to the transactions conducted until the date of the Board of Directors' decision regarding the termination of membership shall prevail.
 - (5) The Board, other relevant public entities and institutions and the Exchange must be immediately informed of the member whose CCP membership has been terminated.

CHAPTER THREE

Clearing and Settlement and CCP Service Principles

Takasbank's liability

ARTICLE 11 - (1) Takasbank is the central counterparty with the open-offer method for the transactions conducted in the Market and settled in the System. For these transactions, Takasbank undertakes completion of clearing and settlement by acting as buyer against the seller and as seller against the buyer. Without prejudice to the limitations set forth in article 36 of the Central Counterparty Regulation and the market liquidity conditions, Takasbank assumes, in its capacity as the central counterparty, the clearing and settlement obligations arising from the transactions conducted in the Market by the Members in accordance with the principles and procedures stipulated in this Procedure and the legislation.

(2) In the open-offer method, the liability of Takasbank against the parties of the transaction starts at the moment the buy and sell orders are matched in the Market and ends with the completion of the clearing and settlement at the due date of the transaction. For the transactions being cancelled by the Exchange, the liability of Takasbank against the parties shall cease at the moment the updates regarding the cancellation of the transactions are made by Takasbank. Should the limit allocated by Takasbank to the Member on a transaction basis in accordance with the fourth paragraph of article 5 of the Central Counterparty Regulation be exceeded, Takasbank shall, without prejudice to the provisions of article 28 of this Procedure, not be liable for any loss arising out of the transactions it has refrained from.

(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 to their customers.

(4) In covering the liquidity needs and the losses to be incurred in case of any default, the provisions stipulated in Chapter Five of the Central Counterparty Regulation shall apply as to be limited to the liquidity conditions and constraints.

Marketplaces and platforms to which clearing and settlement and CCP service are provided

ARTICLE 11A- (1) Clearing and settlement of all transactions conducted in the marketplaces and platforms under the structure of the Market is performed by Takasbank except for the exemptions imposed by the Board. The provision of article 17 of the Central Clearing and Settlement Regulation there of shall be reserved

(2) Clearing and settlement of the foreign currency denominated transactions conducted in the marketplaces/platforms under the structure of the Market shall be concluded by Takasbank by using the accounts held at the correspondent bank and/or Takasbank.

(3) Takasbank Board of Directors may decide, if it is also deemed appropriate by the Board, upon request or by obtaining the opinion of the Exchange, to provide only clearing and settlement service and not to provide CCP service or terminate the CCP service for some marketplaces or platforms to be newly established or already existing in the Market or for some securities to be newly issued or already being traded therein. Takasbank announces the marketplaces/securities to which it will provide CCP service via a General Letter.

(4) No Takasbank guarantee exists for completion of clearing and settlement relating to the marketplaces/ platforms and/or securities to which CCP service is not provided in accordance with the affirmative opinion of the Board.

(5) Completion of clearing and settlement operations in due time is conditional upon the fulfillment by the obligor members of their obligations on time.

(6) Collateral at an amount calculated in accordance with the methods determined by Takasbank shall be received from the members as to be used for any default which may arise from the clearing and settlement transactions of the marketplaces/platforms and/or precious metals/contracts to which the CCP

service is not provided in the Market. Collateral received for clearing and settlement shall be collected from the members to ensure not to get effected from the price change risk of the currency and precious metal subject to default during the period from occurrence of any default to its resolution. Takasbank's liability for any default related to the marketplaces/platforms and/or precious metals to which CCP service is not provided shall be limited to the collateral received for clearing and settlement.

General principles

ARTICLE 12 - (1) The members conduct their transactions by accessing Takasbank system through the web infrastructure.

- (2) The settlement of all transactions conducted in the Market is performed by Takasbank.
- (3) The rights and obligations of the members arising from their transactions subject to the clearing and settlement are concluded on account over the designated accounts by Takasbank.
- (4) In the payment of cash obligations arising from the clearing and settlement transactions, the currency in which the transactions are conducted shall be used. The transactions are included in the settlement at their start date and expiry date.
- (5) Completion of clearing and settlement operations in due time is conditional upon the fulfillment by the obligor members of their obligations on time.

Settlement date and period

ARTICLE 13 - (1) The transactions conducted in the Market shall be settled on the same day (T+0) and the settlement of the future-dated transactions shall be made on the value date. However, the value date constraint shall not be sought for the transactions conducted in the market due to default.

- (2) In determining the settlement periods, the business days on which Takasbank, the correspondent bank and the Market are open shall be taken into account.
- (3) The settlement operations shall be performed within the time periods given below. The default provisions shall be applied for the obligations failed to be fulfilled within the settlement periods without the need for any notice.

Transaction type	Time
Settlement start time (*)	14:00
Fulfillment of the Obligation Deadlines (*)	
TL	17:15
USD	21:00
PRECIOUS METAL	17:00
EUR	21:00
Receivable Transfer Times (*)	
TL (to TIC Account)	14:00 - 17:15

TL (to CBRT ZK Account)	17:16 - 19:30
TL (to Free Account No.11)	19:31 - 21:00
USD (**)	14:00 - 21:00
EUR (**)	14:00 - 21:00
PRECIOUS METAL	14:00-21:00
Variation Margin (P/L) Times	
Settlement start time	9:00
Fulfillment of the obligation deadline	13:00
Fulfillment of the obligation deadline - Half business day	12:30
Receivable distribution deadline	17:15
Receivable distribution deadline- Half business day	12:45
Margin restoration	
Margin restoration deadline	13:00
Margin restoration deadline - Half business day	12:30
Guarantee Fund Contribution deadline	13:00
Guarantee Fund Contribution deadline- Half business day	12:30

(*). No settlement shall be made on half business days and on public holidays.

(**) For the transfers outside of Takasbank, the operational business rules of the relevant payment system shall be applied.

(4) It is not possible for the parties to conclude the settlement transactions by fulfilling their cash obligations before the settlement date.

(5) The settlement periods can be temporarily changed by the General Manager due to the problems arising from the clearing and settlement, custody, payment or market operating systems.

Operating days and hours of the system

ARTICLE 14 - (1) The system opens at 08:00 a.m. and closes at 21:30 in the official business days. For the half-days, the closing time is 16:00. The transactions shall be conducted within the time periods set forth in this Procedure on condition that they fall into these periods.

(2) If required, the operating days and hours shall be changed by the Bank and announced to the members.

(3) For the transactions conducted in the system, the system time shall constitute the base.

Currency

ARTICLE 15 - (1) In the payment of obligations arising from the clearing and settlement transactions, using the currency in which the transactions are conducted is essential.

Finality of settlement

ARTICLE 16 - (1) The settlement instructions and transactions and the payment operations arising from the transactions conducted in the Market can neither be revoked nor can be cancelled including the state of temporary or permanent suspension of the member activities and initiation of liquidation actions before the administrative and judicial authorities.

(2) Upon any notice served for the member to Takasbank regarding all types of measures and decisions regulated by the laws which inhibit the member from making any disposition on the funds or capital market instruments in a manner to include temporary or permanent suspension of transfer of funds or capital market instruments and imposing any restriction thereon, for the transactions of the Member conducted in Borsa İstanbul Inc. Swap Market;

- a) If the member activities are suspended or any factor which would impede the continuation of its activities is identified, the Exchange shall be informed via the fastest means of communication to stop its Exchange transactions.
- b) All contracts executed in the Market and transmitted to the clearing and settlement system shall be deemed finalized and they are included in netting, and the clearing and settlement transactions of the debts and receivables resulting from the netting shall be concluded. However, contract cancellations shall be exempt therefrom, whereas the contract amendments and position transfers shall be included in the clearing and settlement process with their new form.
- c) Collateral established by the member by its available cash and security balances at Takasbank shall be used to terminate its obligations.
- ç) All obligations of the member against Takasbank must be fulfilled to be able to take action in accordance with the decisions served to Takasbank.

Netting

ARTICLE 17 - (1) In calculating the net payable or receivable amount for the transactions conducted in the Market, employing multilateral netting method on currency and precious metal basis by observing client/portfolio segregation is essential.

(2) The marketplaces/platforms and/or precious metals to which CCP service is provided and the marketplaces/platforms and/or precious metals to which CCP service is not provided are not netted-off together.

Clearing and settlement principles

ARTICLE 18 - (1) In the clearing and settlement operations, the payment versus payment and delivery versus payment principles shall be applied. In order for the cash settlement receivables to be paid, the collateral obligations must have been fulfilled and there must be sufficient balance in the settlement pool.

(2) The cash receivable distribution of the members not fulfilled their collateral obligation shall firstly be made up to the margin deficit to the Turkish Lira or Foreign Currency denominated collateral accounts

depending on the currency to be received. The remaining receivable shall be transferred to their free accounts at Takasbank.

(3) The receivables shall be paid partially for obligations fulfilled partially on the settlement date.

Rectify the Transactions Conducted in the Market

ARTICLE 18 (A)

(1) Any request for the correction transactions relating to the transactions conducted in the Market shall be informed to Takasbank in writing. The correction for the requests based on a good reason shall be made as given below as a result of Takasbank evaluation. Takasbank, when evaluating the correction request, possesses right to request additional documents validating the underlying reason for the request, and in the event that the reason is deemed as invalid upon evaluating the documents submitted, Takasbank possesses right not to permit the transaction correction.

(2) After the correction made in the trade account and customer account number areas in the order, the customer category is updated automatically depending on the account type. However, no correction can be made on other areas.

(3) Transaction corrections can be made within the session hours. Takasbank may make changes on the hours determined for the transaction corrections.

(4) Transactions shall not be rectified after the netting cut-off.

Market clearing and settlement operations

ARTICLE 19 - (1) The clearing and settlement of the trades conducted in the Market is performed on the start and expiry dates.

(2) The obligations regarding the transactions conducted in the Market shall be fulfilled by making debt coverage through Takasbank screens within the hours specified in the third paragraph of the 13th article of the Procedure.

(3) The settlement obligations are monitored in the System on a currency and precious metal basis and on the basis of two different risk groups;

a) For the transactions of the members' own portfolio, the "Member Risk Group".

b) For the transactions conducted to the account of the customers, "Customer Risk Group".

(4) In case the member has any debt in both risk groups, the partially paid amounts shall be used at first to pay off the debt of the "Customer Risk Group".

(5) If the member to whom the receivable distribution is made has any debt to another risk group, the distributed receivables shall be offset against the debt of the risk group to which the member is indebted.

(6) In order for the receivable distribution in Turkish Lira and foreign currency to be made, the member must have fulfilled its collateral obligation.

(7) It is possible to partially fulfill the settlement obligations and the receivable distributions are performed partially by Takasbank for the obligations fulfilled partially.

(8) The members' TL-denominated settlement receivables are transferred to their TIC accounts at CBRT, their reserve requirement accounts at CBRT or their free accounts at Takasbank, and their precious metal receivables to their accounts at the Borsa İstanbul A.Ş. Precious Metal Market in accordance with the hours referred to in article 13 of this Procedure.

(9) The receivable distribution in Turkish Lira and Foreign Currency of the members not fulfilled their collateral obligation shall firstly be made up to the margin deficit to the Turkish Lira or Foreign Currency

denominated collateral accounts depending on the currency to be received. The remaining receivable shall be transferred to their free current accounts at Takasbank.

(10) The members' foreign currency-denominated settlement receivables (USD and EUR) are transferred to their free accounts at Takasbank in accordance with the hours referred to in article 13 of this Procedure. Upon request, they are delivered to the member accounts at the correspondent bank informed to Takasbank through the "Correspondent Bank Notification Form" given in Appendix.1 and if no account notification is made to Takasbank, they are delivered to their free accounts at Takasbank. Takasbank shall not be responsible for the non-delivery with the same day value to the member's correspondent bank of the settlement receivables transferred via automatic SWIFT nor for their delayed delivery.

Variation margin (P/L) settlement operations

ARTICLE 20 - (1) The variation margin settlement process includes the settlement of the variation margins, variation margin refund amount which is paid at the value date and their financing cost.

(2) The variation margin is calculated in Turkish Lira at the end of each day to neutralize the internal value of the swap transaction conducted in the Market and the settlement operations are performed in Turkish Lira. In the calculations, the last 10 minutes average of the Interbank spot market foreign currency buying/selling average exchange rates before the valuation time and the discount rates calculated based on yield curves obtained from the market on a daily basis shall be used. For the precious metal price, the average of the spot market buying/selling average price in the last 10 minutes shall be used.

(3) In determining the receivables and debt arising from the valuation, applying the multilateral netting method by reciprocally offsetting the debts and receivables and transforming them to a single debt or receivable in client/portfolio segregation is essential. In the settlement operations, the Free of Payment (FOP) principle shall be applied.

(4) Net TL denominated cash receivables or debts resulted from netting are displayed in the member screens.

(5) The obligations are fulfilled by the members by making debt coverage through Takasbank screens until 13:00 (13:00 included).

(6) It is also possible to partially fulfill the settlement obligations, and partial settlement shall be made against the partially fulfilled obligations at the time periods set by Takasbank. Settlement shall be made at the time intervals set by Takasbank depending on the pool balance by starting from the lowest receivable. However, the receivable distribution shall firstly be made to the CBRT in the event that it has any variation margin receivable.

(7) The settlement receivables are transferred to the members' free current accounts at Takasbank. However; the receivable distribution of the members not having fulfilled their collateral obligation shall firstly be made up to the margin deficit to their Turkish Lira denominated margin accounts. The remaining receivable, if any, shall be transferred to their free current accounts at Takasbank.

(8) The settlement receivables transferred to the free current accounts at Takasbank shall not be transferred via EFT to TIC accounts at CBRT.

(9) Transactions executed at the market on behalf of members' portfolio and clients are monitored as two different risk groups "Member Risk Group" and "Client Risk Group" respectively. The variation margin for contracts to which CCP service is not provided cannot be netted with other contracts.

(10) In the case that the member has settlement obligation for both risk groups, partial fulfillments are first used to close out "Client Risk Group" debt.

CHAPTER FOUR

Account Structure

Account Operations

ARTICLE 21 - (1) All members intending to trade in the Market are obliged to open their cash, trade margin and guarantee fund accounts at Takasbank, the precious metal accounts at Borsa İstanbul A.Ş.

(2) Upon completion of the membership operations; for Turkish Lira: “11-1 Account” and as to the foreign currency; for USD: “11YP-10101 Account”, for EUR: “11YP-10120 Account”, “SWPNM 10101 Account” opened for interest accrual on the USD balances deposited beforehand and “SWPNM 10120 account” opened for interest accrual on the EUR balances deposited beforehand shall be opened automatically at Takasbank.

(3) The trade margins are monitored at two different accounts: for the Portfolio, the “Member Account” and for the customers, the “Customer Account”.

(4) The collateral and settlement obligations are fulfilled on account.

(5) Takasbank correspondent bank information to be used for the foreign currency transactions are as follows:

Takasbank SWIFT / BIC	Currency Type	Correspondent Bank	Correspondent Bank SWIFT/BIC	Account No. at Correspondent Bank
TVSBTRISXXX	EUR	CITIBANK EUROPE PLC, FRANKFURT	CITIDEFFXXX	4115556024
TVSBTRISXXX	USD	CITIBANK NA, NEW YORK, NY	CITIUS33XXX	36892258

(6) Risk management is made over the position accounts.

(7) Operations regarding deposit/withdrawal to/from the relevant account for the collateral are performed through the market screens. No direct transaction is conducted to these accounts listed below and they are used for reporting.

Type of Collateral	Account Name	Account/Depo
The government domestic debt securities/ Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Trade margin depo (Portfolio)	036
The government domestic debt securities/ Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Guarantee fund collateral depo	037

Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Trade margin depo (Portfolio)	036K
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Guarantee fund collateral depo	037K
TL	Trade margin in cash	SWPNT
TL	Guarantee fund collateral in cash	SGFNT
USD	Trade margin	SWPFX-10101-1
USD	Guarantee fund collateral	SGFFX-10101-1
EUR	Trade margin	SWPFX-10120-1
EUR	Guarantee fund collateral	SGFFX-10120-1
GBP	Trade margin	SWPFX-10103-1
GBP	Guarantee fund collateral	SGFFX-10103-1
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Trade margin	5076
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Guarantee fund collateral	5075
Standard gold traded on the exchanges	Trade margin	SWIAU
Standard gold traded on the exchanges	Guarantee fund collateral	SWG AU
Shares in BIST100 Index	Trade margin	SWP
Shares in BIST100 Index	Guarantee fund collateral	SWG
Equity umbrella fund shares	Trade margin	SWP
Equity umbrella fund shares	Guarantee fund collateral	SWG
Debt instruments umbrella fund shares	Trade margin	SWP
Debt instruments umbrella fund shares	Guarantee fund collateral	SWG
Money market umbrella fund shares	Trade margin	SWP
Money market umbrella fund shares	Guarantee fund collateral	SWG

Borsa İstanbul A.Ş. shares	Trade margin	SWP
Borsa İstanbul A.Ş. shares	Guarantee fund collateral	SWG
Government debt securities issued by USA and Germany	Trade margin	5076
Government debt securities issued by USA and Germany	Guarantee fund collateral	5075
Commodity Certificates (Gold Based) issued by Directorate General of Mint and Stamp Printing House of Republic of Türkiye, Ministry of Treasury and Finance.	Trade margin	SWP
Commodity Certificates (Gold Based) issued by Directorate General of Mint and Stamp Printing House of Republic of Türkiye, Ministry of Treasury and Finance.	Guarantee fund collateral	SWG

Account Types

ARTICLE 21A- (1) The position and collateral accounts associated with the trading accounts can be opened at Takasbank in two different types: the “Client” and the “Portfolio”. The portfolio account is the account in which the transactions conducted by the member for its own portfolio are monitored. Monitoring client positions in the multiple position accounts in a collective manner is essential.

(2) Customer and/or portfolio segregation shall be made for the collateral accounts opened for the marketplaces/platforms and/or precious metals/contracts to which the CCP service is not provided pursuant to the consent of the Board.

(3) The members shall monitor the positions and collateral of their own portfolio and the customer positions and collateral in a separate manner in the accounts to be opened at Takasbank. Collateral deposited by the members to the collateral accounts associated with the multiple position accounts by Takasbank shall be deemed to belong to the Member.

Segregation

ARTICLE 22 - (1) In the Market, the customer transactions, positions and collateral are monitored in the multiple or single trading and position accounts opened and linked to the Member and in the margin accounts associated with these accounts, in a separate manner from the Member’s own transactions, positions and collateral.

(2) Positions and collateral of the member’s own portfolio are monitored in a position account to be exclusively opened and in the margin account associated with this account.

Account migration

ARTICLE 23 - (1) Positions monitored in the position accounts and the collateral associated with these positions can be migrated by Takasbank between the CCP members upon instruction of the transferee and transferor CCP members, if deemed appropriate by Takasbank. In such a case, the transferor CCP member shall obtain the written consent of its customers whose positions and collateral are to be transferred.

- (2) In order for the accounts in which the positions of several customers are held to be migrated, the instruction of all customers holding positions in these accounts shall be required. Collateral associated with the position accounts for which migrating instructions have been given by the customers shall be migrated by the instruction of the member.
- (3) Takasbank's right to refuse the account migrating requests with respect to the soundness of clearing and settlement operations and the security of settlement shall be reserved.
- (4) If the positions monitored in the accounts of any member whose membership activities have been restricted or whose membership has been terminated due to default or for other reasons are transferred together with the collateral associated with these positions to another member, the migrating transactions shall be conducted by Takasbank;
- a) If any pre-designation for the transferee member has been made in the agreement signed between the transferor Member and Takasbank; in accordance with the provisions stipulated in the agreement.
 - b) If, although no pre-designation regarding the transferee member has been made in the agreement signed between transferor Member and Takasbank, the transferor member makes an agreement with the transferee member until the date on which the migrating will be made; in accordance with the provisions stipulated in that agreement.
 - c) If no designation has been made in line with the provisions of the item (a) and (b) of this paragraph, to the extent that Takasbank achieves to find a transferee Member.
- (5) Should the account migrating operation be made, the collateral held in the transferred accounts cannot be withdrawn until the reconciliation is achieved between the records of Takasbank and those at the member whose activities have been restricted or whose membership has been terminated. Provisions regarding any proceeding pursued by the administrative and judicial authorities shall be reserved.
- (6) Accounts failed to be migrated due to unable to find a member to take over the positions and collateral, or unavailability of sufficient time to do so or because of margin deficit, or those having any margin deficit after the liquidation of positions may be made subject to liquidation in accordance with the principles of Chapter Five of the Central Counterparty Regulation. The collateral balance to be occurred after the liquidation of positions in the accounts failed to be migrated due to unable to find a transferee member shall be returned pursuant to article 27 of the Central Counterparty Regulation.
- (7) For the accounts linked to a member whose membership activities have been restricted or whose membership has been terminated due to default or for other reasons; if such accounts are related to the marketplaces/platforms to which CCP service is not be provided in accordance with the Board permission or the precious metals/contracts held in the accounts are those of the precious metals/contracts to which the Board has given permission for non-provision of CCP service, then Takasbank may not provide migration service for the positions related to such positions.

CHAPTER FIVE

Risk Management and Collateralization Principles

Risk management

ARTICLE 24 - (1) The risk management in the Market is performed by Takasbank.

(2) Transactions conducted in the market by the member on its behalf are monitored under the "Member" account, whereas the transactions conducted by them on behalf of their customers are monitored under the customer omnibus account. Risk management for the trade margins is carried out over these 2 accounts/risk groups.

- (3) The margin requirement of each account is calculated in a separate manner and the collateral adequacy of each position account is controlled separately.
- (4) In the market, pre-trade, at-trade and post-trade risk management processes are applied. Takasbank receives the opinion of the Exchange in pre-trade risk management processes.

Pre-trade risk management

ARTICLE 25 - (1) Order transmission cannot be made over the accounts which have no trading limit in the Market.

- (2) The trading limit shall be determined by Takasbank by taking the rating note and equity level of the member into account.
- (3) In the trading limit control conducted as part of the pre-trade risk management calculations, net amounts are taken into account on the basis of contract type.

Initial margin, at-trade and post-trade risk management

ARTICLE 26 - (1) In the BIAS Swap Market, the first risk calculation on the value date of the transaction shall be made at the end of the day.

- (2) The initial margin shall be collected to remove the impact of any change occurred in the value during the period to be elapsed until the resolution of the default arising in the event the member fails to fulfill its obligations within the time periods set forth in the procedure.
- (3) The initial margin shall be calculated by Takasbank by using a minimum of 1 year data set and a minimum of 99,00% confidence level. Parameters forming the basis for the initial margin are revised once a month by also considering the market conditions. If deemed necessary, Takasbank may revise the initial margin parameters in accordance with the market conditions without waiting for the one month' period to expire. The parameters designated for the initial margin shall be announced via a general letter.
- (4) The initial margin could be differentiated on the basis of the maturity of the transaction, counterparties to trade, precious metal and the currency. In cases where the initial margin for precious metal contracts is not differentiated on the basis of the maturity of the transaction, the daily depreciation implied by the transaction is added to the initial margin obligation of the member who borrow in the asset subject to the depreciation at the end of day risk calculations. Offsetting positions to be taken in different gold or currency swap transactions can be subjected to correlation within themselves.
- (5) As part of the post-trade risk management process, Takasbank shall update the risk amounts of the positions and related collateral accounts at 11:00, at 13:00 and at 15:00. By the conducted intraday valuation operation, the deficit/surplus amount demonstrating the difference between the required margin amount for the accounts and the valued collateral amount shall be identified. The last 10 minutes average of the Interbank spot market buy/sell average exchange rate shall be used at the valuation time. For the precious metal price, the average of the spot market buying/selling average price in the last 10 minutes shall be used.
- (6) The amount of collateral surplus in an account also represents the withdrawable collateral amount for that account. For the members having an intra-day temporary variation margin obligation as a result of the valuation, their such obligation shall be deducted from their withdrawable collateral.
- (7) In addition to the routinely-performed end-of-day collateral adequacy controls, an intra-day margin call may also be issued to the accounts which have any collateral inadequacy. In the end-of-day risk calculations, the contracts to expire the next business day may be excluded from the initial margin calculation. The members to whom a margin call is issued during the day are obliged to make available

the sufficient collateral balance at their margin accounts within two hours. The default provisions shall be applied for the members failing to fulfill their collateral obligation until the designated time.

(8) Margin calls are issued through the members screens provided by Takasbank, via reporting or electronic mail. Should the margin call be issued through the system, the member shall be deemed to have received the call without the need for any further warning or notice. The responsibility of the member starts at the moment the call made by Takasbank is received by the member.

(9) The instant settlement positions in the accounts opened by the members at Takasbank and their guarantee fund contributions and collateral shall be made subject to the updating operation by Takasbank.

(10) In calculating the margin requirement, no netting shall be made between the positions of the different risk groups, currency/currency and precious metal/currency pairs.

Variation margin and funding cost calculations

ARTICLE 27 - (1) The variation margin required by the exchange-based positions opened during the first value date shall be determined by taking account of the difference between the Turkish Lira equivalent amounts of the net present values calculated from the exchange rates of the related currencies and the discount rates calculated based on yield curves of related currencies obtained from the market on a daily basis. In calculating the variation margin of the exchange-based positions opened before the calculation date, the end-of-day net present values of the previous day and the end-of-day net present values of the relevant day shall be compared.

(2) The variation margin generated by the precious metal swap positions opened during the first value date shall be determined by considering the difference between the precious metal price at the transaction and the exchange rate/precious metal price at the end of the day. In calculating the variation margin of the precious metal-based positions opened before the calculation date, the end-of-day precious metal exchange rate/price of the previous day and the end-of-day precious metal exchange rate/price of the relevant day shall be compared.

(3) The variation margin amount being calculated on the basis of each contract shall be netted on a currency/precious metal basis. The funding cost, if any, and variation margin refund related to contacts at maturity, if any, shall be added to or deducted from such amount.

(4) The variation margin balance subject to the funding cost shall be calculated on a contract basis over the cumulative net balance of the variation margin.

(5) The amount of funding cost shall be calculated over the weighted average overnight interest rate formed for the relevant day in BIAS Debt Securities Market, Normal Orders Market in Repo- Reverse Repo Market and calculated by using the following formula: $F = ((\text{Cumulative Net Variation Margin Balance} * \text{Overnight Interest}) / 360)$

(6) The party's cumulative net positive balance from the variation margin amounts that have transferred throughout the term of each transaction shall be part of netting between daily variation margin and funding costs.

Risk Limits

ARTICLE 28 - (1) Takasbank defines risk limits to the Members based on their financial capability. Risk limits can be determined separately for the Market but can also be determined in total for all markets. Risk limits are determined over the collateral amounts required to be held due to the positions carried by the Members in the markets to which CCP service is provided and announced as notional amounts to the members.

- (2) The limit determined on a member basis is notified by Takasbank only to the relevant member.
- (3) Whether or not the member's total required margin resulting from all positions it has taken for itself and its customers exceeds its risk limit is also checked during the day.
- (4) It is essential that the member cannot submit a new order in the event that a transaction exceeds the risk limit. In this case, pending orders can be canceled. The responsibility thereof shall belong to the member.

CHAPTER SIX

Principles Regarding Collateral

Assets eligible as collateral and guarantee fund contribution

ARTICLE 29 - (1) The following assets can be used by the Members for the fulfillment of their margin and guarantee fund contribution obligations. Takasbank Board of Directors is authorized to also accept other assets designated in article 19 of the Central Counterparty Regulation as collateral or guarantee fund contribution and determine the group/sub-group limits thereof.

- a) Cash (Turkish Lira),
- b) Convertible currency (USD/EUR/GBP),
- c) Government debt securities,
- ç) Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey,
- d) Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey,
- e) Shares in BIST100 index,
- f) Equity umbrella fund shares,
- g) Debt instruments umbrella fund shares,
- ğ) Money market umbrella fund shares,
- h) Standard gold traded on the exchanges,
- ı) Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities
- i) Borsa İstanbul A.Ş. shares
- j) Government debt securities issued by USA and Germany
- k) Commodity Certificates (Gold Based) issued by Directorate General of Mint and Stamp Printing House of Republic of Türkiye, Ministry of Treasury and Finance.

(2) The share of the sum of securities eligible as collateral and the guarantees accepted by Takasbank which have been issued or given by any issuer or bank or by other issuers and banks belonging to the same capital group with that issuer or bank (except for the securities issued by the Undersecretariat of Treasury and the guarantee and securities of other banks whose majority of capital belongs to the Undersecretariat of Treasury) in the collateral accepted by Takasbank for this market cannot exceed 25%. For the collateral exceeding 25% limit in the conducted periodic controls, the order of priority shall be taken into account; and the owner members of the lastly deposited collateral leading to the limit overrun shall be warned via an electronic mail, and asked to replace the collateral.

(3) The guarantees of the banks and companies owned by the members and/or affiliated to the capital group to which they belong and the securities issued by them (except for the securities issued by the Undersecretariat of Treasury and the guarantee and securities of other banks whose majority of capital belongs to the Undersecretariat of Treasury) cannot be given by the member as collateral to Takasbank.

- (4) Theoretical pricing formulas and methods that can be used in the valuation of assets accepted as collateral and guarantee fund contribution by Takasbank shall be published on Takasbank website.
- (5) In order for the Fixed Income Securities to be accepted as collateral, the principal and coupons representing the entire security should be deposited together as collateral. Decomposed fixed income securities are not accepted as collateral. The fixed-income securities which are entrusted as collateral lose their ability to be eligible as collateral at the end of the business day before redemption. When redemption or coupon payment occurs, the relevant amount is transferred to cash collateral account. The member bears the responsibility of ensuring that the collateral level is maintained by considering the operational procedures involved in coupon payments and redemption.
- (6) Maintaining the collateral level by considering any change that may occur in the collateral values of the shares and similar collateral due to the equity position is under the responsibility of the Member.
- (7) Should gold is pledged as collateral, it must be composed of 100 gram and its multiples gold bullion bars that are traded as standard gold in the Exchange Precious Metals and Diamond Market.
- (8) Commodity Certificates issued by Directorate General of Mint and Stamp Printing House of Republic of Türkiye, Ministry of Treasury and Finance are included in the collateral valuation under the underlying asset group to which they are linked.
- (9) Out of mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities, those issued and denominated in TL by Türkiye Kalkınma ve Yatırım Bankası A.Ş. Varlık Finansman Funds and having at least “AA+” long term local currency rate are accepted as collateral.
- (10) Out of the assets accepted as collateral, those defined to its system are monitored through the Current Collateral Report available in Takasbank screens. Should the assets not included in this report be intended to be given as collateral, a notification must be made at least one business day before to Takasbank to enable the relevant asset to be defined in the system. The responsibility for monitoring shall belong to the member.
- (11) Out of lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Türkiye, those issued and denominated as Turkish Lira, USD and Euro are accepted as collateral.

Updating the values of assets eligible as collateral and guarantee fund contribution

ARTICLE 30 – (1) The non-cash assets accepted as collateral and guarantee fund contribution shall be made subject to valuation at the end of each trading day by Takasbank over the prices determined below. Making the valuation at the end of day is essential. However, intra-day calculation shall also be made if it is deemed necessary by Takasbank.

Collateral	Valuation Criteria	Explanation
Convertible currency	CBRT Foreign Currency Buying Rate	Indicative CBRT rate determined at 15:30. In the intraday valuations, the last trade price realized in the interbank foreign currency market at the moment the valuation is made shall be used.

Government Debt Securities	CBRT prices, Market price, Theoretical price determined by Takasbank	In the end-of-day valuation operations, the benchmark daily values of Government Domestic Debt Securities determined by CBRT shall be used. In the intra-day valuations, the price of the asset formed in BIAS Debt Securities Market and if access to that prices is not possible, the theoretical price determined by Takasbank shall be used.
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	CBRT prices, Market price, Theoretical price determined by Takasbank	In the end-of-day valuation operations, the benchmark daily values of Government Domestic Debt Securities determined by CBRT shall be used. In the intra-day valuations, the price of the asset formed in BIAS Debt Securities Market and if access to that prices is not possible, the theoretical price determined by Takasbank shall be used.
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank.	They are valued by using the prices calculated by the yield curve comprising of zero-coupon and fixed coupon bonds issued by Ministry of Treasury and Finance of Turkey, if the yield curve is failed to be formed, the price determined by Takasbank is used.
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Intra-day: Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank End-of-day: Theoretical price determined by using Takasbank yield curve or the price determined by Takasbank	Prices calculated by the yield curve comprising of the traded Eurobonds and if the yield curve is failed to be formed, the price determined by Takasbank.
Shares in BIST100 index	Intra-day: Last trade price realized in BİAŞ Equity Market before the calculation time. End-of-day: Session-end last trade price.	Should no trade is realized in the Exchange, the theoretical price determined by Takasbank. For the traded securities, the last trade price. If the unmatched buy and sell orders (in case the buy and sell are received simultaneously) are received later than the last trade price, the average buy and sell prices can also be used.
Equity and debt instruments umbrella fund shares	Price announced by its issuer on the relevant date.	Price announced by its issuer is used for the following business day.

Standard gold traded on the exchanges	Intra-day: The latest trade price realized in BİAŞ Precious Metals and Diamonds Market before the calculation time. End-of-day: BİAŞ Precious Metals and Diamonds Market end-of-day bulletin price.	It is valued with the price calculated by using the CBRT foreign currency buying rate of the previous end-of-day price, over the USD/ONS price formed for T+0 dated transactions in Borsa Precious Metals and Diamonds Market. Should no trade is conducted, the theoretical price or the weighted average price formed in the previous session can be used.
Government debt securities issued by USA and Germany	Intra-day: market prices are taken into consideration. End-of-day: market prices are taken into consideration.	They are valued by using the prices calculated by the yield curve comprising of zero-coupon and fixed coupon bonds issued, if the yield curve is failed to be formed, the price determined by Takasbank is used.
Certificates Traded in Exchanges	Intra-day: Last trade price realized in the market before the calculation time. End-of-day: Session-end last trade price.	If no trade has been executed at Borsa, the theoretical price set by Takasbank.

Valuation haircuts

ARTICLE 31 – (1) In calculating the valuation haircuts representing the deduction rates and to be applied to the collateral and guarantee fund contributions, the parametric, non-parametric or simulation-based statistical methods deemed appropriate by Takasbank can be used. In determining the collateral valuation haircuts, the relevant asset's credit risk rated by Takasbank, its maturity, its volatility under extraordinary market conditions, its liquidity, and its currency risk, if any, may be taken into account. Haircuts for the securities listed on the BIST100 Index shall be announced by general letter.

(2) In the calculations to be made, 99,90% statistical confidence level and 2 business days holding period shall be used. The historical data length to be used in the calculations is minimum 1 year. For the assets for which there is insufficient data or no data at all, the valuation haircuts shall be determined by taking the haircuts calculated for the assets with similar qualifications as reference.

(3) The valuation haircuts shall be reviewed once a year. If it is deemed necessary, it is possible to make the review in the shorter time periods. Should any change be occurred in the valuation haircuts after the review, the new valuation haircuts shall be announced to the Members. In calculating the collateral values of the assets eligible as collateral against the central counterpart and/or clearing and settlement service, the following valuation haircuts shall be taken as a basis.

Collateral Type	Valuation Haircut
Cash (Turkish Lira)	100%

Convertible Currency (USD)	90 %
Convertible Currency (EUR)	89%
Convertible Currency (GBP)	89%
Government Debt Securities	0-1 Year 94% 1-5 Years 81% 5 Years and more 79%
Eurobonds issued by the Republic of Turkey Ministry of Treasury and Finance (Eurobond-USD)	Up to 5 Years 89% 5-10 Years 89% 10-30 Years 88% 30 Years and more 86%
Eurobonds issued by the Republic of Turkey Ministry of Treasury and Finance (Eurobond- EUR)	Up to 5 Years 89% 5-10 Years 85% 10-30 Years 66% 30 Years and more 66%
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	0-1 Year 92% 1-5 Years 79 % 5 Years and more 77 %
Shares in BIST100 Index	%82-%72
Equity Umbrella Fund Shares	87 %
Debt Instruments Umbrella Fund Shares	96 %
Money Market Umbrella Fund Shares	98 %
Standard gold traded on the exchanges	88 %
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	0-1 Year 92% 1-5 Years 79 % 5 Years and more 77 %
Borsa İstanbul A.Ş. shares	100%
Government debt securities issued by USA	Up to 5 Years 89% 5-10 Years 89% 10-30 Years 88% 30 Years and more 87%

Government debt securities issued by Germany	Up to 5 Years 89 % 5-10 Years 88 % 10-30 Years 88 % 30 Years and more 87 %
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Collateral composition limits

ARTICLE 32 - (1) For other assets to be accepted as collateral apart from cash Turkish Lira and the composition limits thereof, the rates given in the following table shall be applied. Takasbank Board of Directors is authorized to set new assets to be accepted as collateral and the composition limits for such assets or make revision in the composition limits including those determined in this Procedure.

Assets Eligible as Collateral	Group Limit	Sub-group Limit (As group limit percentage)
Cash (Turkish lira)	Maximum %100	-
Convertible Currency (USD/EUR/GBP)	Maximum %100	-
Government Debt Securities	Maximum %100	%35
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Maximum %100	%35
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Maximum %100	%25
Shares in BIST100 Index (Group 1)	Maximum %90	%20
Shares in BIST100 Index (Group 2)	Maximum %60	%20
Shares in BIST100 Index (Group 3)	Maximum %40	%20
Equity umbrella fund shares	Maximum %50	%20
Debt instruments umbrella fund shares	Maximum %50	%20
Money market umbrella fund shares	Maximum %50	%20
Standard gold traded on the exchanges	Maximum %50	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Maximum %50	%40
Borsa İstanbul A.Ş. Shares	Maximum %50	-
Government debt securities issued by USA and Germany	Maximum %50	%50

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

Title to collateral

ARTICLE 33 – (1) The title to collateral received pursuant to the CCP service shall transfer to Takasbank in accordance with the second paragraph of article 78 of the Law. Takasbank shall acquire the ownership right upon establishment of the contract and by transfer of the assets subject to collateral in compliance with the legal procedures.

(3) In the event that the receivables of Takasbank are required to be covered from collateral due to the default of the Member or because of the reasons set forth in the provisions of the agreement or the relevant legislation, Takasbank shall be entitled to sell the asset subject to collateral in the exchange or other organized markets, if such asset is listed in any of these markets and cover its receivable from the sale proceeds thereof or offset the value of these assets against the obligations of the borrower without being obliged to fulfill any precondition such as serving any notice or warning, allotting time, obtaining a permission or approval from the administrative or judicial authorities, turning the collateral into cash through an auction or another way, etc.

(4) Since title to collateral belongs to Takasbank pursuant to article 78 of the Law, the rights arising from the collateral shall also belong to Takasbank. Takasbank shall return the collateral together with the rights thereon at the due date in accordance with the provisions of article 27 of the Central Counterparty Regulation and upon request of the Member, provided that the obligations have been fulfilled.

Collateral monitoring and management

ARTICLE 34 – (1) Collateral associated with the positions held in the risk groups are monitored separately in the accounts linked to the member. Collateral of the member associated with its multiple client positions cannot be used for closing any collateral deficit arising from the accounts of the member's own portfolio nor for resolving any default. Collateral associated with the member portfolio can be used for covering any margin requirement arising from all position accounts linked to the member or for resolving any default. The provision of the third paragraph of article 78 of the Law shall be reserved.

(2) The member is obliged to close its clearing and settlement obligations until the end of the time periods set forth in this Procedure. Otherwise the Member shall be deemed defaulted without the need for serving any notice, its cash and precious metal receivables, if any, shall not be paid and the default provisions shall be applied to the Member.

(3) The Members can fulfill their margin call obligations by depositing collateral for the relevant position accounts. Transactions regarding collateral depositing, withdrawal, valuation, account update and fulfillment of obligations shall be performed on a position account basis.

(4) Pursuant to article 79 of the Law, Takasbank's rights and entitlement on the value of assets it has received as collateral by virtue of the operations it performs as central counterparty cannot be restricted in any manner. The member's lack of power of disposition, for any reason, on the assets subject to collateral shall not prevent Takasbank from a bona fide real right acquisition. Any title or limited real right claim of third parties on the value of assets subject to collateral cannot be raised against Takasbank.

(5) Devoting time for composition about the collateral provider, approval of its composition, devoting time for composition after bankruptcy, entering into composition process by abandoning its assets, restructuring by way of conciliation, its bankruptcy, postponement of its bankruptcy, or the relevant provisions of the Law regarding gradual liquidation or the proceeding procedures under the Execution and Bankruptcy Law No. 2004 can under no circumstances limit Takasbank's rights and entitlement on collateral.

Collateral deposit or withdrawal operations

ARTICLE 35 – (1) Collateral deposit/withdrawal operations shall be performed from the member screens over Takasbank application in two stages in accordance with the principle based on the fact that those entering the deposit/withdrawal instruction and those approving such transaction are being different authorized users. The collateral deposit and withdrawal operations shall be performed in electronic environment.

(2) Collateral deposit and withdrawal transactions shall be performed by way of making electronic transfer from or to the member free accounts of the relevant asset. If, as a result of updating the accounts, the collateral amount in an account exceeds the required collateral amount, the excess amount can be withdrawn. In case no sufficient collateral is available in the relevant account, the withdrawal requests shall be rejected.

(3) Withdrawing the required collateral amounts shall not be allowed. Collateral withdrawal operation cannot be performed from the accounts which have collateral restoration obligation.

(4) In the controls conducted for the collateral withdrawal operations to calculate the withdrawable collateral, the required collateral shall be deducted from the total collateral amount available in the accounts at Takasbank at the moment of calculation.

(5) Deadlines for collateral deposit and withdrawal operations are as follows.

Assets Eligible as Trade Margin	Full Day Deposit Deadline	Half Day Deposit Deadline	Full Day Withdrawal Deadline	Half Day Withdrawal Deadline
Cash (Turkish lira)	19:00	12:45	15:40	11:40
Convertible Currency (USD/EUR,GBP)	19:00	12:45	19:00	12:45
Other Non-Cash Assets Accepted as Collateral Regarding Central Counterparty Service	19:00	12:45	19:00	12:45

(6) The deadlines for the collateral depositing and the withdrawal of collateral other than Turkish Lira are for the transfers between the accounts at Takasbank. For the transfers to or from outside of Takasbank, the operational business rules of the relevant payment system/depository institution shall be applied.

(7) Execution of the transactions through the user codes and passwords allocated to the personnel authorized by the members and within the time periods announced by Takasbank is essential. However, in case of force majeure, it is also possible to trade by giving a written instruction to Takasbank.

Interest accrual on cash collateral and guarantee fund contributions

ARTICLE 36 – (1) Cash Turkish Lira collateral and guarantee fund contributions deposited by the members are accrued interest over the amount remaining after deducting the portion to be set aside as compulsory reserve, with the best possible conditions by Takasbank in accordance with the principles stipulated in the Procedure by taking the credit risk and liquidity conditions into consideration. The accrual process is performed within the limits of Takasbank by way of depositing the amount subject to the interest to the banks as either deposit or depo and making it subject to a repo transaction. Takasbank can also place the cash collateral to the organized money markets for interest accrual purposes. Interest accrual may not be made in extraordinary market conditions. No interest shall be paid if the interest accrual is failed to be made by Takasbank due to the market conditions.

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

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

(4) The members wishing to receive no interest must inform Takasbank in writing of their such request. Interest Accrual on the foreign exchange settlement obligation deposited beforehand

ARTICLE 37 – (1) Foreign exchange settlement obligation amount (USD/EUR) being deposited by the members in advance of the value date in order to fulfill the SWAP market obligations are invested after deducting the portion to be set aside as reserve requirement, with the best effort basis conditions by Takasbank in accordance with the principles stipulated in the Procedure by taking the credit risk and liquidity conditions into consideration. The investment process is performed within the limits of Takasbank by way of depositing the amount subject to the interest to the banks as either deposit or depo and making it subject to a repo transaction. Takasbank can also place the cash collateral to the organized money markets for investment purposes. Investment may not be made in extraordinary market conditions. No interest shall be paid if the investment process is failed to be made by Takasbank due to market conditions.

(2) Interest is accrued on the amount deposited in the related account only if the member has foreign Exchange Settlement obligation on the following day. Otherwise, no interest is accrued even the account has balances.

(3) Interest accrual on the amount deposited beforehand is made over the balances in the related EUR/USD account of the member at 17:00. No interest is accrued on the amount credited after 17:00.

(4) No interest is accrued on the half business days.

(5) The amount related to the interest accrual shall not be debited up until the Settlement obligation is fulfilled.

(6) Debit coverage is fulfilled through the balance existing in the interest accrual account by the members via Takasbank menus.

(7) The return of the balances erroneously sent by the members is credited to the current accounts of the members by Takasbank via written instruction submitted from the members.

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

(9) Members not demanding interest accrual are asked not to credit the related accounts.

CHAPTER SEVEN

Principles Regarding the Guarantee Fund

Guarantee fund and its general principles

ARTICLE 38 – (1) As part of the CCP service it will be provide in the Market, Takasbank establishes a guarantee fund created by the contribution amounts of the members as to be used for any loss that might be incurred in case of default of the members and exceed the collateral of the relevant members. Participation of the CCP members in the guarantee fund is mandatory.

(2) The guarantee fund contributions of the CCP members are composed of the guarantee fund contributions deposited and the additional guarantee fund contributions to be deposited if requested by Takasbank. Should the Guarantee Fund be used in accordance with the provisions of the CCP Regulation, the Directive on Collateral, Risk, and Default Management Related with Markets where İstanbul Takas ve Saklama Bankası A.Ş and the Procedure, the CCP members may be asked to deposit additional contribution provided that it shall not exceed the deposited guarantee fund contribution amount. The members can be asked to deposit additional contribution at maximum two times in one-year period between 01 April and 31 March. The additional guarantee fund contribution that can be requested at once cannot exceed, for each member, the guarantee fund contribution amount calculated and required to be deposited for the month in which the defaults constituting the base of the request have occurred. The additional guarantee fund contribution amount can be requested either once as the entire balance of the deposited amount or at multiple times in tranches provided that it shall not exceed the total deposited amount.

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

(4) No recourse to the guarantee fund contributions of other Members can be made unless the trade margins of the defaulting Member, its guarantee fund contribution and the capital allocation made by Takasbank for the covered risks in the Market become inadequate.

(5) In case of termination of the membership, the guarantee fund contribution shall be refunded in accordance with the provisions of article 33 of the Central Counterparty Regulation. (6) The assets in the guarantee fund cannot be used other than for their intended purpose.

(7) Covering the contribution amounts to be deposited to the guarantee fund by the members out of the assets in their possession is essential.

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

(9) The positions of the marketplaces/platforms and/or precious metals to which CCP service cannot be provided pursuant to the permission of the Board shall not be taken into account in the guarantee fund calculations.

Size of the guarantee fund and the contribution amount to be deposited by the members

ARTICLE 39 – (1) The size of the guarantee fund cannot be less than the greater of the funding need that would arise in case of joint default of the member with the highest open position and the members with the second and third highest open positions. Such funding need comprises of the portion of the members' risks remaining out of the amount that can be covered by their trade margins. In estimating the risk under stress conditions through statistical methods, minimum 99,5% statistical confidence level, 2 business days holding period and 5 years data set shall be used respectively.

(2) Calculation of the total size of the guarantee fund is renewed provided that it shall not be longer than 3 months, and the sufficiency of the existing guarantee fund is tested.

(3) The guarantee fund contributions of the members are composed of those that have been deposited and the additional guarantee fund contributions to be deposited upon request.

(4) The deposited guarantee fund contributions are composed of the fixed and variable guarantee fund contributions.

(5) The deposited guarantee fund contribution of a member cannot be less than the fix contribution amount. The fix contribution amounts required to be deposited by the members is 2.875.000 TL. This amount shall be reviewed at least once a year by taking account of the developments in the Market, national or international economy and can be changed if necessary. The variable contributions are composed of sequential ranges which have upper and lower limits.

(6) The amounts related to the fixed guarantee fund are determined by taking into account the revaluation rate announced every year by the Ministry of Treasury and Finance in line with the market conditions and announced to the members before the implementation.

(7) In calculating the guarantee fund contribution required to be deposited by each member, the members' average required collateral amounts in the previous month shall be taken into account. The guarantee fund is calculated by multiplying the ratio calculated by dividing the total guarantee fund contribution required by the member to the average collateral amount that the member should have in the market in the previous month, by the average collateral amount of the market, by the minimum guarantee fund size corresponding to the relevant period.

(8) The risk haircut to be used for the guarantee fund contribution calculation shall be calculated once every three months by considering the market conditions. If deemed necessary, Takasbank may revise the risk haircut in line with the market conditions waiting for the three months' period to expire.

(9) The guarantee fund contribution obligations are calculated on the last business day of each month and updated as of the first business day of the following month.

(10) The guarantee fund contribution calculations of the members can be made by Takasbank without waiting for the first business day of the following month by taking account of the risk situation of the relevant members as well as the Market conditions.

(11) The guarantee fund contribution obligations are notified to the members screens provided by Takasbank to the members via message, reporting or electronic mail. Should the guarantee fund contribution obligation notification be sent through the system, the member shall be deemed to have received the call without the need for any further warning or notice. The responsibility of the member starts at the moment the call made by Takasbank is received by the member. If the relevant obligation is failed to be fulfilled within its time period, the member shall be deemed in default.

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

ARTICLE 40 – (1) Assets eligible as contribution to the guarantee fund and the composition limits thereof are given in the following table. Takasbank Board of Directors is authorized to set new assets to be accepted as collateral and the composition limits for such assets or make revision in the composition limits including those determined in this Procedure.

Assets Eligible to Guarantee Fund	Group Limit	Sub-group Limit (As group limit percentage)
Cash (Turkish lira)	Maximum %100	-
Convertible Currency (USD/EUR/GBP)	Maximum %100	-
Government Debt Securities	Maximum %100	%35
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Maximum %100	%35
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Maximum %100	%25
Shares in BIST100 Index (Group 1)	Maximum %90	%20
Shares in BIST100 Index (Group 2)	Maximum %60	%20
Shares in BIST100 Index (Group 3)	Maximum %40	%20
Equity umbrella fund shares	Maximum %50	%20
Debt instruments umbrella fund shares	Maximum %50	%20
Money market umbrella fund shares	Maximum %50	%20
Standard gold traded on the exchanges	Maximum %50	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities	Maximum %50	%40
Borsa İstanbul A.Ş. Shares	Maximum %50	-
Government debt securities issued by G7 countries	Maximum %50	%50

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

(3) Collateral is made subject to valuation at the end of each business day over the prices determined by Takasbank to ensure valuation with the current market prices of the non- cash assets used as guarantee fund contribution. The guarantee fund contribution obligations resulting from the valuation made in a daily manner are notified to the members screens provided by Takasbank to the members via message, reporting or electronic mail. Should the notification be sent through the system to the member having a guarantee fund contribution restoration obligation, the member shall be deemed to have received the call without the need for any further warning or notice. The responsibility of the member starts at the moment the call made by Takasbank is received by the member. If the relevant obligation is failed to be fulfilled within its time period, the member shall be deemed in default.

Principles for use of the guarantee fund

ARTICLE 41 - (1) In default management, the non-defaulting members' non-cash contributions in the guarantee fund shall be started to be turned into cash when the funds available for use up to the item (d) of the first paragraph of article 36 of Takasbank Central Counterparty Regulation fail to be adequate and upon determination that the guarantee fund contributions deposited in cash will remain insufficient.

(2) The contributions deposited to the guarantee fund by the members joined to the guarantee fund after the date on which the relevant default has occurred or the contributions deposited by the existing members against the risks they assumed after the occurrence of the default shall not be used.

(3) In cases which necessitate resorting to the guarantee fund, withdrawal of any contribution from the guarantee fund shall not be allowed during the time period to be elapsed until the loss incurred due to such default is fully covered.

(4) Resorting to the contributions starts with the most liquid assets and their ability to quickly be turned into cash shall be taken as the base. The cash amounts turned into cash from non-cash collateral in the guarantee fund but not used shall be returned pro-rata to the members whose non-cash collateral have been used.

(5) In distributing the loss to be attributed to the guarantee fund to the non-defaulting members, the shares of the members in the guarantee fund shall be taken as the base.

(6) The members are obliged to re-deposit, within 3 business days, their deposited guarantee fund contribution amounts that have been used in accordance with the default management.

(7) If the loss to be attributed to the guarantee fund seems likely to exceed 50% of the fund size, the members may be asked to deposit the additional contributions they have committed. The members are obliged to deposit the additional contributions within 5 business days after the request. The additional contributions that have not been used either in part or at all for resolving the relevant default shall be returned. If they, albeit requested, are returned without being used for resolving the default, the request for additional guarantee fund contribution shall be deemed not to have been made.

(8) The additional guarantee fund contribution amount that can be requested from a member in one month's time period cannot exceed the member's guarantee fund contribution amount calculated and required to be deposited for that month.

(9) If the additional guarantee fund contributions requested from the members due to the default are used either in part or in whole, the members shall be asked to restore their guarantee fund obligations to the amount being calculated pursuant to article 30. The guarantee fund contributions exceeding the maximum loss threshold that any Member would assume in the same month upon the default of other members shall only be used in the event of their own default until the end of the month. The standard guarantee fund contribution amounts to be requested from the members who have fulfilled their maximum additional guarantee fund contribution obligation within the one year period between the dates of 1 April-31 March shall only be used for their own default until such one year period is completed.

CHAPTER EIGHT

Principles Regarding the Default Procedures for CCP Service-Provided Assets

General principles

ARTICLE 42- (1) Debts arising from the transactions conducted in the Market shall become due and payable in the following situations.

- a) Failing to fulfill the obligations regarding the settlement transactions within the time periods prescribed in this Procedure.
 - b) Failure to fulfill the intra-day and end-of-day margin call obligations calculated by Takasbank within the time periods prescribed in this Procedure.
 - c) Failure to fulfill the guarantee fund and additional guarantee fund contribution replenishment obligations within the time periods prescribed in this Procedure.
 - ç) Failure to fulfill the variation margin settlement (P/L) obligation within the time periods prescribed in this Procedure.
 - d) Decision by Takasbank for the liquidation of the Member's obligations pursuant to article 9 of this Procedure.
- (2) In case of failing to fulfill the obligations in accordance with the principles and procedures stipulated in this Procedure at the date on which the debt becomes due and payable, the Member shall fall into default without serving any further notice. If the member falls into default due to any debt of the member which became due and payable, all debts of the member shall become due and payable.
- (3) In the event of default, the Member shall not be allowed to withdraw its collateral in its relevant accounts. By taking the size of default into consideration, Takasbank may ask from the Exchange to restrain order transmission by the Member over its accounts.
- (4) The Member can be allotted time by Takasbank to resolve its event of default until the end of the business day following the default date at most. In case of failing to restore the event of default until the end of the allotted time period, Takasbank may trade in the organized and over-the-counter markets to raise the amount subject to the default. To be able to execute the transaction, the trade margin and guarantee fund contribution amounts of the member can be used.
- (5) The default provisions shall be applied in the event the collateral and guarantee fund obligations are failed to be fulfilled within the time periods set forth in this Procedure.
- (6) The members who have fulfilled their following obligations arising from the transactions conducted in the Market after the below-given time periods shall be deemed to have defaulted without the need for any notice.
- a) For TL obligations: after 17:15.
 - b) For precious metal obligations: after 17:00
 - c) For USD obligations: after 21:00.
 - ç) For EUR obligations: after 21:00.
 - d) For variation margin obligations: after 13:00.
 - e) For collateral obligations: after 13:00.
- (7) The default interest to be collected from the members who have fulfilled their obligations on the settlement date after the designated time can be differentiated from the members who have fulfilled their obligations in the following day.
- (8) For the fulfillment of obligations, the time of debt closing made from the screens of the member shall be taken as the base.

Settlement and variation margin default

ARTICLE 43- (1) Without prejudice to the limits set forth in article 36 of the Central Counterparty Regulation and paragraphs 4 and 5 of this article and the market liquidity constraints, the financial liability of Takasbank for the defaults occurred in the market shall be limited to the payment of debt on the

settlement date; and should the debt be failed to be paid on its settlement date, to the payment in accordance with the following principles and procedures depending on the market conditions and Takasbank's liquidity facilities, and further to that, to the mistreatment payment to be calculated till the date on which the payment will be made. For the cash defaults occurred on the value date of the transaction, Takasbank must trade by taking the transaction's original maturity and cash flows into account. Should the event of default be failed to be resolved until the end of the time period given by the Default Management Committee, Takasbank shall try to trade on a best effort basis, for the beneficiary, in the organized and/or over-the-counter markets by using the member's blocked receivables and the default management resources until the end of the next business day to facilitate payment of the amount to be paid to the beneficiary.

(2) If the debt is fully paid within the time periods set forth in this Procedure, the payment shall be made to the settlement beneficiary during the same day.

(3) Without prejudice to the limits set forth in article 36 of the Central Counterparty Regulation and the market liquidity constraints, the financial liability of Takasbank for the cash default occurred on the due date of the transaction shall be limited to the payment of debt on the due date; and should the debt be failed to be paid on its due date, to the payment in accordance with the following principles and procedures depending on the market conditions and Takasbank's liquidity facilities, and further to that, to the mistreatment payment to be calculated till the date on which the payment will be made. Should the event of default be failed to be resolved until the end of the time period given by the Default Management Committee, Takasbank shall try to raise the fund subject to the default on a best effort basis, for the beneficiary, from the organized and/or over-the-counter markets by using the member's blocked receivables and the default management resources until the end of the next business day following the default to facilitate payment of the amount to be paid to the beneficiary. If the foreign currency subject to the default is failed to be raised from the market, its TL equivalent shall be paid. In determining its equivalent in TL, the Central Bank buying rate on the business day following the default shall be used and the relevant amount shall be paid in the next business day following the calculation. In the Market, the liability of Takasbank arising from the default against the foreign currency- recipient party on the value date of the transaction shall be limited to the sum of the foreign currency that can be obtained through TL amount subject to the transaction and the pre-trade risk premium amount received, if requested, for such transaction.

(4) In the Market, the liability of Takasbank arising from the default against the foreign currency recipient party on the start date of the transaction shall be limited to the sum of the foreign currency obtained through TL/precious metal amount subject to the transaction and the pre-trade risk premium amount received for such transaction and the guarantee fund of the default member.

(5) In the Market, the liability of Takasbank arising from the default against the TL-recipient party on the value date of the transaction shall be limited to the sum of TL obtained through the foreign currency/precious metal amount subject to the transaction and the pre-trade risk premium amount received, if requested, for such transaction and the guarantee fund of the default member.

(6) In case of any default, the default interest shall be charged pursuant to the provisions of article 45. A mistreatment payment up to 2/3 of the collected default interest amount shall be made, for the portion failed to be delivered, to the obligee member for the period to be elapsed until its receivable is fully credited.

(7) If the calculated interest amount remains below the minimum default penalty, the payment shall be made over the calculated amount.

(8) The obligor member shall be obliged to pay such debt together with its default interest to be calculated in accordance with article 45.

(9) In case of the default of variation margin, the member's collateral and guarantee fund contribution amounts shall be used. For the missing part, an intra-day margin call shall be made.

Precious metal default

ARTICLE 44- (1) Without prejudice to the thresholds set forth in article 36 of the Central Counterparty Regulation and paragraphs 4 and 5 of this article and the market liquidity constraints, the financial liability of Takasbank for the defaults occurred in the market shall be limited to the payment of debt on the settlement date; and should the debt be failed to be paid on the settlement date, to the payment in accordance with the following principles and procedures depending on the market conditions and Takasbank's liquidity facilities, and further to that, to the mistreatment payment to be calculated till the date on which the payment will be made.

(2) If the debt is fully paid within the time periods set forth in the procedure, the payment shall be made to the settlement beneficiary during the same day.

(3) the precious metal default occurred on the value date of the transaction, if the event of default is failed to be resolved until the end of the time period granted by the Default Management Committee, Takasbank shall try to raise precious metal by using the member's blocked receivables and the default management resources until the end of the following business day, on a best effort basis, to the payee from the organized and/or over the-counter markets to facilitate payment of its receivable amount. Should the precious metal subject to the default be failed to be raised from the market, its equivalent in TL shall be paid. In determining its TL equivalent, the Central Bank buying rate on the business day following the default or the price of the precious metal used in the calculation of the end of day variation margin shall be used. The relevant amount shall be paid in the next business day.

(4) In the Market, the liability of Takasbank arising from the default against the precious metal recipient party on the start date of the transaction shall be limited to the sum of the foreign currency obtained through TL/foreign currency amount subject to the transaction and the pre-trade risk premium amount received for such transaction and the guarantee fund of the default member.

(5) In case of any default, the default interest shall be charged pursuant to the provisions of article 43 and 44. A compensation payment shall be made, for the portion failed to be delivered, to the oblige member for the period to be elapsed until its receivable is fully credited, up to 2/3 of the collected default interest amount.

(6) If the calculated interest amount remains below the minimum default penalty, the payment shall be made over the calculated amount.

(7) The obligor member shall be obliged to pay such debt together with its default interest to be calculated in accordance with article 45.

Default interest

ARTICLE 45- (1) Default interest calculated over the unfulfilled obligation amount, by taking account of the periods referred to in the third paragraph of this article, shall be collected together with other legal liabilities from the members who have failed to fulfill their clearing and settlement, variation margin settlement, collateral and guarantee fund obligations within the designated time periods.

(2) In calculating the default interest, the calendar days between the default date and the date on which the obligation is fulfilled shall be taken into account.

(3) The defaulting member shall be charged a default interest,

- a) Up to the amount of TL and precious metal denominated non-fulfilled obligation amount to be calculated based on the below-given haircuts by using the higher of the weighted average

overnight interest rates formed in BIAS Repo Reverse-Repo Market, CBRT Interbank Money Market or Takasbank Money Market.

- b) Up to the amount of USD denominated non-fulfilled obligation amount to be calculated based on the below-given haircuts by using the FED Funds rate.
- c) Up to the amount of EUR denominated non-fulfilled obligation amount to be calculated based on the below-given haircuts by using the ECB Marginal Lending Facility rate.

Obligation Type	Time Range	Haircut
Cash Settlement (TL)	Between 17:16-21:00	0,50
	After 21:00 and after the value date	2
Cash Settlement (USD)	After 21:00 and after the value date	2
Cash Settlement (EUR)	After 21:00 and after the value date	2
Precious Metal	Between 17:01-21:00	0,5
	After 21:00 and after the value date	2
Variation Margin Settlement (TL)	Between 13:00-17:15	0,50
	After 17:15 and in the following days	2
Collateral and Guarantee Fund Depositing	Between 13:00-18:15	0,50
	In the following days	2

(4) A lower limit and an upper limit shall be applied to the default interests to be collected. These limits are the same with the limits used for the Debt Securities Market default operations. The said limits shall be determined by the Board of Directors by taking account of the revaluation rate published by the Ministry of Finance each year and shall be announced to the members before enforcement.

Lower limit	If the calculated default interest is less than the lower limit amount, the designated lower limit amount shall be collected.
Upper limit	If the calculated default interest is greater than the upper limit set for the relevant time range, the designated upper limit amount shall be collected.

- (5) The upper limit shall not be applied for the obligations failed to be fulfilled within the same day.
- (6) The minimum default base shall not be applied in the Market.
- (7) If Takasbank has incurred any loss exceeding the default interest due to the non-payment of debt in whole or in part, such loss shall be indemnified by the defaulting Member.
- (8) Default interest amount is calculated by using the following formula;

$$\text{Base} * \text{Interest Rate} * \text{Days} * \text{Haircut} / 360$$

Base:

For TL: Amount closed with delay

For FX: Amount closed with delay * Exchange rate

Precious metal: The precious metal price in the calculation of variation margin at the end of the day

Exchange rate: Average of CBRT Foreign Currency Buying and Selling Rates on the settlement date

Accrual, notification and collection

ARTICLE 46- (1) The accrued default interest shall be paid together with other legal liabilities within 1 business day following the accrual date.

(2) A notification shall be served to the member for the default interest being accrued. The default interest and other legal liabilities failed to be paid, albeit accrued, by the member within their time period shall be collected ex-officio by Takasbank from the free account of the member in the next business day.

(3) The default interest and other legal liabilities failed to be paid, albeit accrued, by the member within their time period shall be collected ex-officio by Takasbank from the free account of the member in the next business day. If they are failed to be collected, interest and other legal liabilities shall also be collected in accordance with the provisions of article 46 related to the default management process.

Objecting to default interest accruals

ARTICLE 47 - (1) The default interest-accrued members may object at Takasbank based on the reasons that the default has occurred without its own fault due to problems arisen from the clearing and settlement, relevant central depository system or payment system or a material mistake has been made in the calculation of the default interest. The objection shall not inhibit the payment of default interest.

(2) The objection must be made at the latest within 1 week after the default interest accrual date with a letter accompanied by the documents related to the objection.

(3) The defaulting member's objection shall be evaluated and resolved by the Default Committee established within the structure of Takasbank in accordance with article 35 of the Regulation.

(4) If the objection made by the member is justified, the default interest shall not be applied, and if it has been collected, the relevant amount shall be refunded to the member.

Default management process

ARTICLE 48- (1) The relevant default of the Member failing to close its settlement obligations on time and whose settlement debt has been failed to be closed as a result of the transactions conducted in the Market by Takasbank within the time periods set forth in the Procedure shall be informed to the Exchange, the Board and the relevant member pursuant to article 13 of the CCP Regulation, and all trading authorization of the member on its accounts shall be suspended.

(2) Takasbank may take one or more than one of the following measures, including but not limited to those, about the defaulting member in accordance with the relevant articles of the Central Counterparty Regulation. In using the default management tools, the reason of default and its impact on the markets shall be taken into account.

- a) Migrating the open positions in the non-defaulting member accounts to a non-defaulting member either in whole or in part together with their collateral pursuant to article 26 of the Central Counterparty Regulation.
- b) Turning into cash any non-cash collateral and guarantee fund contributions in the customer accounts with collateral deficit that are associated to the defaulting member's own portfolio and to itself.
- c) Using the excess trade margin of the member in other markets.
- ç) Using the guarantee fund contributions of the member in other markets to the extent it has no risk in the relevant Market.
- d) Acting in accordance with article 41 of this Procedure to make use of the guarantee fund contributions of the non-defaulting members.

- e) Migrating the positions and collateral of the customers either ex officio when necessary or upon request of the customers to other members without seeking the consent of the defaulting member.
- f) Closing the positions in an ex-officio manner.
- g) Netting any debt, receivable, position, collateral, right and obligations existing with the same party.

(3) Any deficit occurred after the enforcement by Takasbank against the defaulting member of the default provisions stipulated in this Procedure and the provisions of Chapter Five of the Central Counterparty Regulation and failed to be covered by the collateral and guarantee fund contributions of the defaulting member shall be defined as the loss of Takasbank and other Members and assumed in order as laid down in the first paragraph of article 36 of the Central Counterparty Regulation. Collections to be made later from the defaulting member shall be distributed pursuant to the fifth paragraph of article 36 of the Central Counterparty Regulation.

(4) Should the capital allocated in accordance with article 36 of the Central Counterparty Regulation against the covered risks be used due to the default, Takasbank shall restore the used amount within a month. The allocated capital amount to be restored in this way during one year period cannot exceed the amount determined in the beginning of the period. If any default reoccurs within the period of one month to be lapsed until the restoration of the used capital, the remaining portion of the allocated capital, if any, shall be used. The guarantee fund of the non-defaulting members shall be resorted for the portion which cannot be covered. Restoration of the capital shall not necessitate the return of the guarantee fund contributions being used.

Compensation Payment

ARTICLE 49- (1) A compensation payment shall be made in accordance with the conditions set forth in the fifth paragraph to the member to whom the delivery or payment has been failed to be made on the settlement date due to the default of the member in fulfilling its commitment. However, no compensation payment shall be made for any delivery and payment made with delay within the same day.

(2) For making the compensation payment, no member request shall be sought. If, on the other hand, the member wishing not to receive any compensation payment informs Takasbank in writing of its request thereof, no payment shall be made to that member.

(3) A payment at the rates referred to the fourth paragraph of this article over the default penalty collected from the defaulting member shall be made as a compensation payment against the delayed days to the member to whom delivery or payment has been failed to be made due to the defaulting member.

(4) A compensation payment at 2/3 of the highest of the weighted average overnight interest rates that have been formed in BIAS Repo-Reverse Repo Market, CBRT Interbank Money Market or Takasbank Money Market shall be made for the payments failed to be made on the value date to the obligee members on the basis of the calendar days between the value date and the date on which the payment or delivery has been made.

(5) In order for the compensation payment to be made;

- a. If the defaulting member has made a written objection, the objection should have been deemed null and the collection of the default interest should have been resolved.
- b. The payment or delivery should not have been originated from any problem occurred at the Exchange, Takasbank, SWIFT, Correspondent Bank and CBRT system.

(6) The compensation payments shall be made to the members' free current accounts at Takasbank.

CHAPTER NINE

Final Provisions Fees and commissions

ARTICLE 50- (1) For the fees and commissions to be charged by Takasbank to its Members in relation to the services it provides under this Procedure, the provisions of article 35 of the General Regulation shall apply.

(2) CBRT is exempt from the commission and fees to be collected.

(3) If any additional fee is charged to Takasbank by the correspondent bank due to the transfer of swap transactions, these fees shall be recoured to the members.

Exemptions and exceptions

ARTICLE 51- (1) Pursuant to the first paragraph of article 52 of the Central Counterparty Regulation, the Central Bank of the Republic of Turkey is the natural CCP member and shall not be subject to other provisions of this Procedure.

(2) The rules related to the functioning of the transactions to be conducted by CBRT in the Market shall be determined by a separate Protocol to be signed between Takasbank and CBRT.

(3) CBRT is not obliged to pay any default interest to the extent it fulfills its obligations for the transactions it has conducted in the Market within the same day.

(4) Transactions in Takasbank system may also be executed by Takasbank on behalf of CBRT.

Disciplinary provisions

ARTICLE 52- (1) In addition to those contemplated in the Market Directives and the Procedure, the disciplinary provisions stipulated in the Chapter Seven of the Central Clearing and Settlement Regulation shall also be applied to the Members failing to comply with the obligations stipulated in this Procedure.

Measures to be taken in extraordinary situations

ARTICLE 53- (1) Takasbank is authorized to determine and enforce the measures to be taken in case of presence of extraordinary situations where it foresees the clearing and settlement operations or the markets may be adversely affected. In such cases, Takasbank is entitled to take the measures referred to in article 48 of the Central Counterparty Regulation.

Announcements

ARTICLE 54- (1) The details and amendments about the issues included in the scope of the Procedure shall be announced to the members by Takasbank.

System Business Continuity

ARTICLE 55- (1) System business continuity plan and the emergency rules are stipulated by the “Takasbank Business Continuity Regulation”, the sub-arrangements and continuity plans associated to this regulation. General policy texts for the business continuity shall be announced to the participants via Takasbank website.

Amendment in system rules

ARTICLE 56- (1) Takasbank is authorized to amend the system rules. In cases where the amendment of system rules are made subject to the approval of the competent authorities pursuant to the relevant legislation, the amendments shall enter into force upon such approval.

(2) In cases which necessitate any infrastructure change, the members shall be informed within a reasonable amount of time before the enforcement of such changes to enable them to make the necessary preparations.

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

ARTICLE 57- (1) In case of no provision in the Procedure, the provisions of the Central Counterparty Regulation and the Central Clearing and Settlement Regulation shall be applied.

Enforcement

ARTICLE 58 - (1) The Procedure shall enter into force on the date of its publication.

Execution

ARTICLE 59 - (1) The provisions of the Procedure shall be executed by the General Manager.