

İSTANBUL TAKAS VE SAKLAMA BANKASI A.Ş.
TAKASBANK SECURITIES LENDING MARKET DIRECTIVE

CHAPTER ONE

Purpose, Scope, Basis, Definitions and Abbreviations

Purpose

ARTICLE 1 -

(1) The purpose of this Directive is to regulate the principles and procedures regarding the operation of the Securities Lending Market within Istanbul Takas ve Saklama Bankası A.Ş. at which Takasbank provides Central Counterparty Service.

Scope

ARTICLE 2 -

(1) Takasbank Securities Lending Market transactions fall within the scope of this Directive. For any issues that are not regulated in this Directive, the provisions of Takasbank Central Counterparty Regulation shall apply.

Basis

ARTICLE 3 -

(1) This Directive has been prepared on the basis of Article 77 and 78 of the Capital Markets Law No. 6362 published in the Official Gazette dated 30.12.2012 and numbered 28513, and the provisions of the relevant Communiqué of the Capital Markets Board and of Takasbank Incorporation Central Clearing and Settlement Regulation and of Takasbank Incorporation Central Counterparty Regulation.

Definitions and Abbreviations

ARTICLE 4 -

(1) Terms used in this Directive shall bear the following meanings;

- a) **Appreciated collateral:** The amount of the total deposited collateral being calculated by the application of margin valuation haircuts, group limits and sub-group limits.
- b) **Board:** The Capital Markets Board,
- c) **Board of Directors:** The Board of Directors of Takasbank.
- ç) **Central Counterparty Regulation:** Takasbank Incorporation Central Counterparty Regulation published in the Official Gazette dated 14.08.2013 and numbered 28735,
- d) **Central Clearing and Settlement Regulation:** Takasbank Central Clearing and Settlement Regulation published in the Official Gazette dated 18.7.2013 and numbered 28711,
- e) **Communiqué:** The relevant Communiqué of the Board which regulates the lending and borrowing transactions,
- f) **CRA:** The Central Registry Agency Incorporation,
- g) **Customer:** The investment funds as well as the real persons and legal entity customers of the members who conduct lending transactions pursuant to the capital markets legislation,
- ğ) **Exchange:** Borsa Istanbul Inc.,
- h) **General Manager:** The General Manager of Takasbank,

- 1) **Law:** The Capital Markets Law No. 6362,
- i) **Market Value:** The amount that is found by multiplying the weighted average price of the securities subject to lending formed in the previous Exchange session of the lending transaction by the number of securities subject to transaction,
- j) **Member:** The Brokerage Houses, Banks and institutions that can execute transactions in this market pursuant to the capital markets legislation,
- k) **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,
- l) **Procedure:** “Procedure on the Application Principles of the Securities Lending Market” containing the principles and procedures regarding the operation and applications of the SLM, which is approved by the General Manager and prepared on the basis of this Directive,
- m) **Representative:** Those authorized by the Brokerage Houses, Banks and eligible institutions pursuant to the legislation to execute transaction in the SLM,
- n) **Required collateral:** Refers to the sum of the collateral which reflects the difference between the transaction prices of the positions and the market prices obtained by using current prices against the potential risks in case of any default arising from the positions taken in market.
- o) **Securities Subject to Lending:** Stocks and exchange traded fund participation certificates to be traded in the Securities Lending Market, which are selected by Takasbank among those that are designated by the Capital Markets Board and the Exchange as eligible for short-selling and margin trading transactions,
- ö) **Securities Lending Market (“SLM”):** The market established and operated by Takasbank which enables the matching of bids and offers of the Brokerage Houses, Banks and the institutions eligible to execute trades in this market pursuant to the Capital Markets legislation and their customers thereof, who wish to lend or borrow securities subject to lending by providing collateral at certain quality, quantity and in periods determined by Takasbank,
- p) **Takasbank:** Istanbul Takas ve Saklama Bankasi A.Ş.,
- r) **Transaction Commission:** The amount which is calculated in accordance with the method stipulated in the Procedure and required to be paid to the lending member and collected from the borrowing member at the maturity date of the transaction as a result of the transactions executed in the Securities Lending Market,
- s) **Value at Risk:** The value which is estimated by generally accepted quantitative methods and represents the maximum loss which may be incurred on the value of a portfolio or an asset hold over a given time span and in certain probability level as a result of fluctuations in the interest rates, exchange rates, commodity and stock prices,

CHAPTER TWO

Membership Principles

Membership

ARTICLE 5 -

- (1) Institutions that satisfy the conditions prescribed in article 6 of this Directive may become a member of the SLM provided that they are authorized by Takasbank.
- (2) Those who are eligible to become a member of SLM shall also be designated as a direct Central Counterparty member in SLM pursuant to the first paragraph of article 8 of the Central Counterparty Regulation.

Membership conditions

ARTICLE 6 -

- (1) In addition to the conditions set out in article 7 of the Central Counterparty Regulation, the following conditions must also be satisfied for membership:
- Having obtained the capital market operating license that enabling to execute borrowing/lending transactions pursuant to the relevant legislation,
 - The minimum equity capital of the member not being less than TL 10.000.000-.
 - Having submitted the declaration related to the data processing, risk management, internal control and internal audit systems, in a format that suits the template set by Takasbank, which has been approved by the Board of Directors of the Members wishing to borrow from the Market.
- (2) Regarding the SLM transactions, Takasbank shall be authorized to determine the minimum criteria it would seek for the Member's information technology, risk management, internal control and internal audit systems within a procedure it will issue, to allow time for compliance to the institutions who fail to meet the prescribed criteria, to receive commitment as well as to control whether the criteria have been met.
- (3) The Board of Directors is authorized to increase the minimum amount of equity capital stated in the item (b) of the first paragraph or to decrease it up to its previous level thereof by taking the relevant capital markets regulations and the market conditions into consideration.

Obligations of the Members

ARTICLE 7 -

- (1) In addition to the obligations specified in article 12 of the Central Counterparty Regulation, the Members are required to;
- act in accordance with the rules and principles stipulated by Takasbank with this Directive and the Procedure for the SLM transactions,
 - deliver the securities subject to lending, and pay the transaction commission and Takasbank commission, and
 - inform Takasbank about their representatives and the relevant updates about them thereof and provide and/or send the information and documents requested by Takasbank within the given time period.

Restriction on Trading Activities of the Member

ARTICLE 8 -

- (1) The SLM activities of the Members may be restricted by Takasbank in the following situations:
- Termination of its membership or suspension of its activities in the markets or capital market instruments where the clearing and settlement service is provided pursuant to article 13 of the Central Clearing and Settlement Regulation,
 - Restriction of its activities in the markets or capital market instruments where the central counterparty service is provided pursuant to the second paragraph of article 14 of the Central Counterparty Regulation,
 - Failure to fulfill the obligations stipulated in this Directive, the Procedure and in the Securities Lending Market Agreement required to be signed between Takasbank and the Member prior to starting transactions,

- c) Identification of any unfavorable situation related to the Member such as protest, seizure, provisional injunction, temporary or permanent suspension of its activities, cancellation of its relevant operating permit, prohibition to execute transaction related to capital market instruments for any reason, decision rendered on its gradual liquidation or bankruptcy, or existence of negative intelligence,
 - d) As a result of the intelligence, financial analysis and/or rating studies periodically conducted by Takasbank; determination of the fact that the credit worthiness of the Member is either diminished or does not exist.
- (2) The Members cannot execute any transaction at the SLM on behalf of the accounts of their portfolios or customers in situations where;
- a) In case of they are in the status of securities default in the SLM or they are banned from trading or have similar restrictions,
 - b) In case of margin call, whether or not to conduct transactions within the framework of the principles specified in the Procedure shall be determined.
- (3) If any situation referred to in this article occurs, Takasbank may resolve the outstanding liabilities of the Member against SLM to be liquidated either in part or in whole. Should any decision be made by Takasbank in this direction, the liabilities of the Member shall become due and payable in accordance with the provisions of article 32 of this Directive and shall be liquidated thereof in accordance with the same article.
- (4) If the Member's activities are restricted for reasons referred to in the items (a) and (b) and (c) and (d) of the first paragraph of this article, this situation shall be notified to the Board on the next business day. On the other hand, if the Member's activities are restricted pursuant to the item (c) of the first paragraph of this article, and if such restriction exceeds 1 business day, a notice shall be notified to the Board by Takasbank thereof.

Termination of Membership

ARTICLE 9 -

- (1) The CCP membership may be terminated by the Board of Directors' decision if any of the following takes place;
- a) Determination by Takasbank that any of the CCP membership conditions stipulated in this Directive and other relevant regulations is no longer met.
 - b) Determination 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 Directive or other relevant regulations.
 - c) Failure of the CCP members whose operations have been restricted in accordance with the provisions of the second paragraph of article 14 of the CCP Regulation to fulfil their respective obligations within a maximum period of six months granted to them pursuant to the sixth paragraph of the same article.
 - c) Upon direct request of the member.
- (2) Those intending to terminate their CCP membership in accordance with the item (c) 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 Directive and other relevant regulations. In such cases, the Board of Directors may consent the termination of its CCP membership. If the request for termination of the membership is submitted without fulfilling all obligations under the Directive and other regulations, the member shall be given a period of 30 days for

fulfilling such obligations. The member that fulfills such obligations within the period of time granted shall notify Takasbank of such case in writing, and the request for termination by the member shall be addressed at the next meeting of the Board of Directors following such notification. Members who fail to fulfill such obligations within a period of 30 days may only apply for terminating their membership once they have closed all their positions.

(3) Takasbank seeks the opinion of the Exchange in terminating the membership of a CCP member.

(4) Takasbank shall be entitled to take all necessary measures, including the transfer of positions of the relevant trading institutions and of their customers to another general CCP member, to ensure systematic and uninterrupted processing of the transactions of the trading institutions whose clearing and settlement operations are performed by those whose CCP membership has been terminated.

(5) Even after the termination of CCP membership, the obligations of the relevant institution against Takasbank under this Directive 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.

(6) The Board, other relevant public entities and institutions and the relevant market operator must be immediately informed of the member whose CCP membership has been terminated.

CHAPTER THREE

Operating Principles of the SLM

Status of Takasbank

ARTICLE 10 -

- (1) Pursuant to this Directive and the Procedure to be published in accordance with this Directive;
 - a) Takasbank is the institution that operates the SLM. The principles and procedures regarding the market orders and transactions shall be stipulated in the Procedure.
 - b) Takasbank is the central counterparty in the SLM transactions with the open-offer method. It acts as the borrower against the lender and as the lender against the borrower.
- (2) Regarding the fulfillment of obligations arising from the lending and borrowing transactions executed by the Members on behalf their customers, Takasbank deals only with the Members. Takasbank shall not be held liable for the obligations of the Members against their customers.
- (3) In the open-offer method, the liability of Takasbank against the parties of the transaction starts at the moment the lending and borrowing orders are matched and ends with the settlement of the obligations.
- (4) Takasbank shall be responsible for returning the securities subject to the lending transaction to the lender at the maturity date of the lending transaction and paying a transaction commission for the time period to be elapsed until the date of return. If the security is failed to be returned, then the corresponding cash amount calculated in accordance with the principles and procedures stipulated in the Procedure shall be paid to the Member.
- (5) The borrowing member shall be responsible against Takasbank for returning the securities at the maturity date of the transaction and paying a transaction commission for the time period to be elapsed until the date of return. Takasbank, upon request of the member, shall return the securities subject to the transaction in accordance with the provisions of the agreement that it has signed with the Member, provided that the borrowing Member fulfilled its obligations pursuant to the paragraph hereof.
- (6) The rights and liabilities of the borrowing and lending members stipulated in this Directive shall be reserved.
- (7) If the parties of the transaction change their intentions in a mutually agreed manner in accordance with the principles and procedures stipulated in the Procedure or if the transactions are cancelled after the

order matching by technical reasons, then Takasbank shall not be deemed to assume any commitment in its capacity as a central counterparty; and for such transactions and Takasbank shall automatically be relieved from the central counterparty position as of the moment of order matching, without the need of any further action.

Working Principles of SLM

ARTICLE 11 -

- (1) In the SLM, the borrowing and lending orders shall be given by the members on a portfolio, customer, investment fund and investment trust basis.
- (2) Pursuant to the fifth paragraph of article five of the Central Counterparty Regulation, transactions conducted by the Member by giving the portfolio, customer, investment fund and investment trust codes shall be monitored separately under the accounts of the member held with Takasbank.
- (3) For the orders and transactions; the principles and procedures regarding the value date, maturity, time, order transmission, realization, amendment, cancellation and modification as well as the order types, the representatives and the amounts shall be stipulated in the Procedure.

Thresholds and Trading Limits

ARTICLE 12 -

- (1) Takasbank shall allocate a “SLM Limit” to the members. Such limit shall not constitute a commitment of Takasbank.
- (2) The SLM limits determined by Takasbank is defined in the system and Takasbank has right to make changes in the SLM limit allocated to the members, when it deems necessary.
- (3) The member can borrow the valuated collaterals either for its own portfolio or for its customers portfolio within the limits set by Takasbank.
- (4) During an order entry, total market value of all borrowing transactions executed by the Member cannot exceed the prescribed SLM limit. The price changes may cause the risk amount to exceed the limit.
- (5) There is no limit conditions for the lenders.
- (6) Shares and exchange-traded fund participation certificates removed from the eligible securities that may be subject to margin trading and short selling shall be removed from the Securities subject to Lending from the end of the settlement period of the final date that they are made subject to short selling and margin trading of securities.
- (7) Takasbank shall be authorized to impose restrictions on the securities that may be subject to the lending on a market, customer and account basis. The application principles thereof shall be stipulated in the Procedure.
- (8) The maximum market value of each order shall be determined in the Procedure provided that the maximum transaction value set in the Exchange spot market shall not be exceeded.

Segregation

ARTICLE 13 -

- (1) In the SLM, the positions and collaterals of the customers are monitored in the single-position and collateral accounts exclusively opened on the name of the customers connected to the member and separately from the member's own portfolio and collaterals. For the transactions executed by Takasbank within the scope of central counterparty services, the collaterals in the collateral accounts associated with the single customer positions shall be deemed to belong to the customers.

- (2) The positions and collaterals of the Members' own portfolios are monitored in the single position accounts and associated collateral accounts to be opened exclusively for the members.

Portability

ARTICLE 14 -

- (1) For the transfer of positions and relevant collaterals monitored in the single accounts, the principles and procedures specified in article 26 of the Central Counterparty Regulation shall be applied. The accounts that cannot be transferred due to collateral deficit or have any collateral deficit after the settlement of the positions may be liquidated in accordance with the principles set out in Chapter Six of this Directive. Any collateral that may remain after the settlement of the positions in the accounts failed to be transferred due to the unavailability of a Member to take them over shall be returned in accordance with article 27 of the Central Counterparty Regulation.
- (2) If the central counterparty membership be temporarily suspended pursuant to the third paragraph of article 14 of the Central Counterparty Regulation for a period of no more than three months, then the positions and collaterals in the accounts connected to the relevant member may be transferred in accordance with article 26 of the Central Counterparty Regulation.

SLM Data screens

ARTICLE 15 -

- (1) Access to the SLM data is made available through the SLM data screens or the application screens provided by Takasbank, where necessary. Orders and transactions entered to the system are reflected to the SLM screens.
- (2) The data vendors and the screen codes as well as the screen features shall be announced by Takasbank.

Settlement of Securities

ARTICLE 16 -

- (1) For the same day value transactions, the settlement of the securities subject to the transaction shall be made at the moment the transaction is executed; and for the future-dated transactions, the settlement thereof shall be made on the value date by transferring them to the relevant accounts held with the CRA.
- (2) Debts on lent securities which become due shall be closed via the screens provided by Takasbank till the debt closing deadline specified in the Procedure either partially or wholly by using the accounts of the borrower with the CRA. The securities returned after the closing shall be transferred to the accounts of the lenders held with the CRA.

Rights arising from securities subject to lending

ARTICLE 17 -

- (1) The financial rights (bonus issue, rights issue and dividend) arising from the stocks subject to loan shall belong to the lender. However, the lender will lose its voting rights associated with the securities subject to lending. If the date of the capital decrease falls between the value date and the maturity date

of lending, then the number of lending transactions to which the stocks on capital decrease are subject to shall be updated at the rate of the capital decrease.

Takasbank commission

ARTICLE 18 -

- (1) The fees to be charged by Takasbank for the transactions executed in the SLM and their collection ways and periods thereof shall enter into force by the proposal of the Board of Directors and approval of the Board.
- (2) The resolution of the Board of Directors regarding the fees and commissions submitted to the Board for approval shall enter into force within 30 days unless no adverse opinion is issued by the Board. In the event the information and documents submitted in the application by Takasbank are found incomplete or if additional information, documents and works are required, then Takasbank shall be informed accordingly and asked to rectify such incompleteness within the time period to be set by the Board. In such a case, the 30-days period shall start from the date the incomplete or additional information, documents and works are submitted to the Board.
- (3) The commission amount shall be collected ex-officio from the accounts of the members being a party to the transactions.

CHAPTER FOUR **Principles Regarding the Collaterals**

Assets accepted as margin collateral and guarantee fund contribution

ARTICLE 19 -

- (1) The following assets can be used in SLM.
 - a) Cash (Turkish lira),
 - b) Convertible Currency (USD/EUR/GBP)
 - c) Government Domestic 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) Gold in the standard traded on the Exchanges,
 - h) Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities
 - ı) Borsa İstanbul A.Ş. shares
 - i) Electronic Warehouse Receipt
- (2) Takasbank may not accept as collateral or guarantee fund contribution the securities and guarantees that it considers to be associated with the member due to the specific correlation relations which may exist between the creditworthiness of the member and the value of assets it has received as collateral or may restrict their acceptance as collateral and guarantee fund contribution. The collateral implementing principles regarding the assets considered to be associated with the creditworthiness of the member shall be stipulated by the Procedure.

- (3) 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 web site.

Collateral agreement

ARTICLE 20 -

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

Collateral Monitoring and Management

ARTICLE 21 -

- (1) In the SLM, gross margining method is employed.
- (2) Collaterals monitored in the accounts associated with the single customer positions can neither be used for closing collateral deficits arising from the accounts belonging to the Member's own portfolio or from other customer accounts nor for resolving the default.
- (3) Pursuant to article 79 of the Law, the rights and powers of Takasbank on the asset values taken as collateral for the SLM operations that it executes as a central counterparty cannot be limited in any way. Lack of power of disposition of the Member, for any reason, on the asset values given as collateral shall not prevent Takasbank from establishing a real right in good faith. Title or limited real right claims of third parties on the asset values given as collateral cannot be asserted against Takasbank.
- (4) Devoting time for composition with creditors about the party supplying collateral, approval of its composition, devoting time for composition after bankruptcy, inclusion of its assets by abandonment

into the composition process, restructuring of its debts by an arrangement, its bankruptcy, postponement of its bankruptcy, or the relevant provisions of the Law regarding gradual liquidation or the proceeding procedures stipulated under the Execution and Bankruptcy Law No. 2004 cannot limit Takasbank's rights and powers on collaterals in any way.

- (5) The principles and procedures for deposit, withdrawal and replacement of assets accepted as eligible collateral and the time periods in respect thereof shall be stipulated in the Procedure

Accrual of interest on cash collateral

ARTICLE 22 -

- (1) Interest shall be accrued on the remaining amount of collateral in cash Turkish Lira in the accounts after deduction of the amount to be maintained as compulsory reserve by Takasbank in accordance with the limits set by Takasbank with the best possible conditions by taking the credit risk and liquidity positions into consideration.
- (2) Taxes and other legal liabilities and Takasbank's commission shall be deducted from the gross interest amount that has been earned through the accrual process.
- (3) The cash collateral in Turkish Lira to be subject to the interest accrual process can only accrue interest if it is available in the Takasbank SLM collateral account at the time prescribed in the Procedure. Turkish Lira denominated cash collaterals which have accrued interest are not allowed to be withdrawn.

Collateral rates

ARTICLE 23 -

- (1) Initial margin is requested from the members in order to cover the risks arising from the positions taken in the SLM. The initial margin is initially taken to cover any price changes that may occur in the Market from the moment the default arises to its resolution, in case the member is in default.
- (2) The initial margin rate shall be determined by Takasbank using a minimum 1 year data set and a holding period of 2 business days with a confidence level of 99,00% and is reviewed quarterly for the periods specified in the Procedure, taking into account market conditions.
- (3) Takasbank can implement intraday maintenance level. Issues related to intraday maintenance level are determined in the Procedure.

Margin Call

ARTICLE 24 -

- (1) Account that collateral amount is below the required collateral level or having a cash collateral deficit is called for collateral completion.
- (2) The margin call shall be notified by sending messages and reports to the customer screens provided by Takasbank. If the margin call is transmitted through the system, the Member shall be deemed to have received the call without any further notice or information thereof. The responsibility of the Member shall begin at the moment the margin call transmitted by Takasbank is received by the Member.
- (3) Accounts that are subject to margin call or in default could exit from their status by depositing collateral and / or reducing margin requirement amount. Margin call related to deficiency in Turkish Lira concentration limit must be covered in cash.

Composition of the collateral

ARTICLE 25 -

- (1) At least %30 of the calculated total collateral requirement must be Turkish lira collateral. Turkish lira and for other assets which accepted as collateral and the composition limits thereof, the rates given in the following table shall be applied. Composition limits are applied on the sum of the cash and non-cash collateral balances. Takasbank Board of Directors is authorized to set composition limits for the new assets to be accepted as collateral or revise the composition limits including those defined in this Directive.
- (2) In calculating the sub-group limits, the group-limit applied total valued portion of the relevant asset amount is taken into account.

Assets accepted as transaction collateral	Group Limit	Sub-Group Limit (as percentage of Group Limit)
Cash Turkish Lira	Max. % 100	-
Convertible Currency (USD/EUR/GBP)	Max. % 70	-
Government Debt Securities	Max. % 70	% 50
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Max. % 70	% 50
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Max. % 70	% 25
Shares in BIST100 Index	Max. % 70	% 75
Equity Umbrella Fund Shares	Max. % 50	% 20
Debt Instruments Umbrella Fund Shares	Max. % 50	% 20
Standard gold traded on the exchanges	Max. % 25	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	Max. % 50	% 40
Borsa İstanbul A.Ş. shares	Max. % 50	-
Electronic Warehouse Receipt	Max. % 25	% 20

Valuation Haircuts

ARTICLE 26 -

- (1) The parametric, non-parametric or simulation based statistical methods that are deemed appropriate by Takasbank shall be used for the calculation of haircut valuation to be applied to the collaterals and the guarantee fund contribution amounts. In the determination of the collateral haircut valuation, the credit risk and the maturity of the relevant asset being evaluated by Takasbank, its volatility in the extraordinary market conditions, its liquidity, and its currency risk, if any, shall be taken into consideration.
- (2) The statistical confidence level and the liquidation period to be used for such calculations cannot be less than 99,75% and 2 business days respectively. It is essential that the historical data to be used in the calculations should not be less than 1 year. For those assets which have insufficient or no historical data, the valuation haircuts thereof shall be determined on the basis of the haircuts calculated for the

assets that have similar characteristics. The valuation haircuts to be determined in this way shall be included in the Procedure.

- (3) The valuation haircuts are reviewed on a regular basis and in periods that are not longer than one year. The haircuts, if deemed necessary, may also be updated without waiting for the regular review period and announced to the Members accordingly.
- (4) The validity of the collateral valuation method being employed is also controlled by Takasbank internal system departments and audited at least once a year.

CHAPTER FIVE

Principles Regarding the Guarantee Fund

General principles

ARTICLE 27 -

- (1) A Guarantee Fund which may be incurred as a result of the default of the Members shall be established by Takasbank with the contribution amounts of the members in order to be used for the portion of the losses exceeding the collaterals of the relevant Member. Central Counterparty Members are obligated to participate in the guarantee fund.
- (2) The guarantee fund/funds contribution amounts of the Central Counterparty Members are composed of the guarantee fund contribution amounts that have been already deposited and of the additional guarantee fund contribution amounts to be deposited when requested. If the Guarantee Fund is used in accordance with the provisions of the Central Counterparty Regulation, the Directive and the Procedure then the Central Counterparty Members may be asked to make additional contribution provided it shall not exceed the deposited guarantee fund contribution amount. The members can be asked to deposit additional contribution at maximum four 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 aggregate of the 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 Directive and other regulations but whose request has not yet been approved by the Board of Directors or whose request for termination of its membership has been approved by the Board of Directors but has been allotted time for the return of its deposited guarantee fund contribution, the maximum guarantee fund obligation for which it may be liable on and after the date on which the member submitted its request for the termination of its membership shall be either two-fold of such member's the guarantee fund amount 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 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 shall be made unless the collaterals of the defaulting Member, its guarantee fund contribution and the capital allocation made by Takasbank for the risks assumed in the SLM become inadequate.
- (5) For the principles regarding the repayment of the guarantee fund contribution amounts of the members whose SLM membership has been terminated, the provisions of article 33 of the Central Counterparty Regulation shall apply.
- (6) The contribution amounts to be deposited to the guarantee fund by the members must be covered from the assets in their possession.
- (7) SLM Guarantee Fund is represented and managed by Takasbank.
- (8) The assets in the Guarantee Fund cannot be used other than their intended purpose.

Interest accrual on the cash contribution amounts in the guarantee fund

ARTICLE 28 -

- (1) Interest shall be accrued on the remaining amount of the guarantee fund contribution in cash Turkish Lira deposited by the Members after deduction of the amount to be maintained as compulsory reserve by Takasbank with the best possible conditions by taking the credit risk and liquidity positions into consideration.
- (2) Taxes and other legal liabilities and Takasbank's commission shall be deducted from the gross interest amount that has been earned through the accrual process.
- (3) The contribution amounts in the Guarantee Fund being subject to the interest accrual process can only accrue interest if they are available in the Takasbank SLM Guarantee Fund Contribution Amount account at the time prescribed in the Procedure. The Guarantee Fund Contribution Amounts which have accrued interest are not allowed to be withdrawn.

Size of the guarantee fund and the contribution amounts to be provided by the members

ARTICLE 29 -

- (1) The size of the guarantee fund shall be determined by taking the market conditions into consideration provided, however, that it shall not be less than the greater of the funding requirement that may arise as a result of the default of the Member who has the highest borrowing and of the joint default of the Members who have the second and third highest borrowing under the stress conditions. The funding requirement is composed of the portion of the Members' risks that cannot be covered by their collaterals at a certain confidence level. Such risk equals to the amount to be found by multiplying the difference between the VaR amount calculated for the lent securities and the portion exceeding 100% of the collaterals by the open positions of the members. The minimum confidence level and the holding period to be used for the value at risk calculations of the securities subject to lending cannot be less than 99,75% and 2 business days respectively.
- (2) For the calculation of the size of the guarantee fund, the Member-based daily borrowing data (open position) for a look back period of minimum one year, if any, are used, The sufficiency of the existing guarantee fund is tested by the calculation renewal of the total size of the guarantee fund in a period of not being less than three months.
- (3) The contribution amounts to be provided by the members to the guarantee fund are composed of the fixed contribution amounts and the variable contribution amounts calculated pro rata to the risks they have assumed. The variable contribution amounts are composed of sequential tranches which have lower and upper limits. The fixed contribution amount, on the other hand, is determined at a level that would not exceed the average amount to be found by dividing the required size of the guarantee fund to the number of members.

- (4) For the calculation of total guarantee fund contribution amount required to be provided by each member, the guarantee fund risk amount which is calculated by multiplying the aggregate borrowing amount of the Members by a risk haircut to be determined shall be used.
- (5) The guarantee fund requirement of each member shall be equal to the fixed contribution amount, if the calculated guarantee fund risk amount of such member is lower than the fixed contribution amount; and if not; it shall be equal to the upper limit of the tranche that the relevant amount falls into.
- (6) For the calculation of the Members' risk amounts, the average amount borrowed in certain time intervals to be determined retrospectively and specified in the Procedure.

Contribution amount to be deposited to the guarantee fund

ARTICLE 30 -

- (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 revise the composition limits of the assets to be accepted as guarantee fund contribution according to the market conditions and set composition limits for the new assets.

Assets accepted as guarantee fund	Group Limit	Sub-Group Limit (as percentage of Group Limit)
Cash Turkish lira	Max %100	-
Convertible Currency (USD/EUR/GBP)	Max %100	-
Government Debt Securities	Max %100	%50
Eurobond issued by the Ministry of Treasury and Finance of the Republic of Turkey	Max %100	%50
Lease certificates issued by Asset Leasing Incorporation of the Undersecretariat of Treasury of the Republic of Turkey	Max %100	%25
Shares in BIST100 Index	Max %70	%75
Equity Umbrella Fund Shares	Max %50	%20
Debt Instruments Umbrella Fund Shares	Max %50	%20
Standard gold traded on the exchanges	Max %25	-
Mortgage-backed securities, mortgage-based securities, asset-backed securities and asset based securities	Max %50	%40
Borsa İstanbul A.Ş. shares	Max %50	-
Electronic Warehouse Receipt	Max %25	%20

- (2) The valuation haircuts to be applied to the Members' contribution amounts to be deposited to the guarantee fund shall be decided based on the same principles applicable for the collaterals. Principles governing the exercise of the rights arising from the Guarantee Fund contribution amounts and other issues related to the contribution amounts shall be stipulated in the Procedure.
- (3) Composition limits are calculated over the total deposited contribution. In calculating the sub-composition limits, total appreciated portion of the relevant asset amount is taken into account.

(4) Non-cash assets in the Guarantee Fund can be replaced in accordance with the request of the Member.

Guarantee fund margin call

ARTICLE 31 -

(1) When the guarantee fund contribution amounts of the Members fall below to the minimum level specified in the Procedure, then a margin call for the guarantee fund contribution amount shall be notified by Takasbank to the relevant members. The margin call for the guarantee fund contribution amount shall be transmitted by sending messages and reports to the customer screens provided by Takasbank. If the margin call for the guarantee fund contribution amount is transmitted through the system, the Member shall be deemed to have received the call without any further notice or information. The responsibility of the Member shall begin at the moment the margin call for the Guarantee Fund Contribution Amount is transmitted by Takasbank is received by the Member. Contribution amounts must be completed by the end of the period specified in the Procedure.. If such call is failed to be fulfilled within its time period, then the Member shall be deemed to have defaulted.

CHAPTER SIX

Default

Acceleration of the lending transactions and default

ARTICLE 32 -

- (1) Except for the lending transactions with no maturity date, the borrower shall have no right to claim the termination of the lending transaction before its maturity date by returning the security it has borrowed.
- (2) Debts arising from the lending transactions shall become due and payable in the following situations:
- a) On the maturity date of the debt,
 - b) Failure of the Member to fulfill its margin call and guarantee fund contribution amount obligations in accordance with the principles and procedures stipulated in the Procedure,
 - c) Decision made by Takasbank for the liquidation of the outstanding liabilities of the member pursuant to article 8 of this Directive,
 - ç) Removal of the security subject to the lending from the list of eligible securities that may be subject to leveraged buyout and short selling pursuant to the provisions of the Communiqué.
- (3) In case the obligations are failed to be fulfilled by the maturity date of the debt in accordance with the principles and procedures stipulated in the Procedure, the Member shall be deemed to have defaulted without having to serve any further notice. Pursuant to the third paragraph of article 35 of the Central Counterparty Regulation, the extra time to be granted to the defaulting Member may not exceed 3 business days.
- (4) The defaulting Member shall be liable to pay a default interest to be calculated according to the time and calculation methods specified in the Procedure and over a default interest rate determined in accordance with the second paragraph of article 31 of the Central Counterparty Regulation. If Takasbank has incurred any loss higher than the default interest amount because of the failure to settle the debt either partially or wholly, then such loss shall be indemnified by the Member. The transaction commission shall continue to be paid during the default.
- (5) In case of default, return of the security is essential. The responsibility of Takasbank against the lender in lending transactions shall be limited to the transaction commission as well as the delivery of the

security subject to the lending on the maturity date; and, in case of failure to deliver it on the maturity date, its return by supplying it from the market in accordance with the principles and procedures stipulated in the Procedure; and in case of failure to return, then its cash equivalent calculated again in accordance with the principles and procedures stipulated in the Procedure and the transaction commission to be computed till the date of the payment. The rate of such transaction commission cannot exceed the default interest rate to be charged by Takasbank to the borrower during the default period.

- (6) In case Takasbank fails to deliver the security subject to the lending to the lender in accordance with the fifth paragraph of this article; then upon request of the lender, Takasbank shall be liable to pay the cash equivalent of the security subject to the lending on the maturity date to be calculated again on the maturity date in accordance with the principles and procedures stipulated in the Procedure together with the transaction commissions.
- (7) In case the debt of the borrowing member is accelerated and becomes payable due to the failure to fulfill its margin call obligation, Takasbank shall be entitled to fully liquidate the borrowings of such member in accordance with the default provisions by converting the collaterals in the relevant account causing the default into cash, purchasing the securities subject to the lending or to close off the borrowed amounts till the collateral rate satisfies the initial margin rate by starting from the debts that are nearest to the maturity date.
- (8) Takasbank has the right of settlement, offsetting and retention on the assets held with itself that are owned by the defaulting Central Counterparty member and other rights and receivables thereof. However, for the market or capital market instruments where multiple position accounts are used, only the positions and collaterals in the defaulting member's own portfolio can be used. Nevertheless, in the execution of this Directive, neither the positions nor the collaterals of the customers other than the defaulted customer sub-accounts can be used under any circumstances.
- (9) If the debt is accelerated and becomes payable as a result of the removal of the securities subject to the lending from the list of eligible securities that may be subject to margin trading and short selling, the lending transaction shall be liquidated in line with the time periods specified in the Communiqué. In case the borrowing member fails to fulfill its obligations in accordance with the procedures stipulated in the Procedure, the default provisions shall be applied and such obligations shall be liquidated pursuant to the provisions of this article.
- (10) If the debts of the borrowing member to Takasbank are accelerated and become payable due to the reasons described in the items (b) and (c) of the second paragraph of this article, a commission amount to be accrued until the maturity date and calculated in the manner specified in the Procedure shall be paid to the lending member. In such a case, the borrowing Member shall also be liable to repay the aforesaid commission amount to Takasbank. On the other hand, if the lending transaction becomes due and payable pursuant to the item (ç) of the second paragraph of this article, a commission payment shall be made to the lending Member for the period to be elapsed till the return date of the securities subject to the lending. Again in such a situation, the borrowing member shall also be liable to repay the aforesaid commission amount.
- (11) Details regarding the execution of the matters mentioned in this section regarding default shall be stipulated in the Procedure.

Default management

ARTICLE 33 -

- (1) For the defaulting member, articles 32 and 34 of this Directive and the provisions of chapter five of the Central Counterparty Regulation shall be applied by Takasbank. The deficits failed to be covered

in this way shall be designated as the loss of Takasbank and of other members in order as laid down in the first paragraph of article 36 of the Central Counterparty Regulation.

- (2) If the capital that has been allocated in accordance with article 36 of the Central Counterparty Regulation against the risks being covered is used due to a default, then Takasbank shall replenish the used amount within a month. The allocated capital amount to be replenished in this way during one year period cannot exceed the amount determined in the beginning of the period. If a default reoccurs within the period of one month to be lapsed until the replenishment of the used capital, then the remaining portion of the allocated capital, if any, shall be used. The guarantee fund of the non-defaulting members shall be used for the portion failed to be recovered. Restoration of the capital shall not necessitate the return of the used guarantee fund contribution amounts.
- (3) 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 of Takasbank.

Principles for the use of guarantee fund

ARTICLE 34 -

- (1) In default management; the non-cash contribution amounts in the guarantee fund belonging to the non-defaulting members shall be converted into cash when the funds that are available for use up to item (d) of the first paragraph of article 36 of the Central Counterparty Regulation fail to be sufficient and upon determination that the guarantee fund contribution amounts deposited in cash shall also be insufficient.
- (2) The contribution amounts deposited by the members who have joined to the guarantee fund after the occurrence of the relevant default or the contribution amounts deposited by the existing members against the risks they assumed after the occurrence of the default shall not be used.
- (3) The use of contribution amounts starts with the most liquid assets; and the ability to quickly be converted into cash constitutes the basis. Cash amounts arising from the conversion of non-cash contribution amounts in the guarantee fund into cash but not used shall be returned pro-rata to the members whose non-cash contribution amounts have been used.
- (4) For the distribution of loss assumed by the guarantee fund to the non-defaulting members, the shares of such members in the guarantee fund shall be taken as the basis.
- (5) The members are obliged to replenish, within 3 business days, their guarantee fund contribution amounts which have been deposited and used thereafter within the scope of the default management.
- (6) If the loss to be assumed by the guarantee fund seems likely to exceed 50% of the total fund size, the members may be asked to deposit the additional contribution amounts they have undertaken. The Members are obliged to provide the additional contribution amounts within 5 business days after the request made thereof.
- (7) A request for an additional guarantee fund contribution amount can be made from the members at most four times in one year period where a capital commitment is made for the covered risks pursuant to the seventh paragraph of article 36 of the Central Counterparty Regulation. The additional guarantee fund contribution amount to be requested in each case cannot exceed the guarantee fund contribution amount of each member that should have been deposited on the relevant date. The maximum loss that may be assumed by each member during one year period due to the default of other members can exceed neither the additional guarantee fund contribution amount that could be made four times in a year nor the total size of the deposited guarantee fund contribution amounts which constitute the basis of such additional guarantee fund contribution amounts.

- (8) If the additional guarantee fund contribution amounts requested from the members due to the default are used either partially or wholly, then the members shall be asked to restore their guarantee fund obligations to the level calculated pursuant to the item (d) of the first paragraph of article 36 of the Central Counterparty Regulation. However; the guarantee fund contribution amounts exceeding the maximum loss threshold that the Members may assume in one year period in case of default of other members shall only be used in the event of their own default until the end of the period. Upon the beginning of the new period, the loss sharing application specified in the first paragraph of article 36 of the Central Counterparty Regulation shall be restarted in accordance with the foregoing principles.

CHAPTER SEVEN

Miscellaneous and Final Provisions

Measures to be taken in extraordinary situations

ARTICLE 35 -

- (1) Takasbank shall be authorized to determine the measures to be taken in case of occurrence of any extraordinary situation where it foresees the operations and reliability of the SLM may be adversely affected, and to implement these measures accordingly. In such cases, Takasbank, further to the appropriate measures among those specified in the second and third paragraph of article 48 of the Central Counterparty Regulation, shall also be authorized to change the trading hours, stop the order transmissions, cancel the transactions and amend their maturities as well as all types of other measures in respect thereof.

Disciplinary provisions

ARTICLE 36 -

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

TEMPORARY PROVISION 1

- (1) Sub-Group Limit, set as 40% for mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities, is to be applied as 100% until 31/12/2019.
- (2) Borsa İstanbul A.Ş. shares are considered as collateral while the buy-back guarantee of Borsa İstanbul remains.
- (3) Additions to the assets accepted as collateral and revisions made to the composition limits of the assets accepted as collateral become effective after publication in the Procedure.

Enforcement

ARTICLE 37 -

- (1) This Directive has been accepted by the resolution of the Board of Directors numbered 380 and dated 20/09/2019 and shall enter into force from the date announced by Takasbank following its adoption by the Board.

Execution

ARTICLE 38 -

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