

**DIRECTIVE ON CENTRAL CLEARING SERVICE TO BE CONDUCTED BY İSTANBUL
TAKAS VE SAKLAMA BANKASI A.Ş. IN TÜRKİYE ÜRÜN İHTİSAS BORSASI A.Ş. ELUS
MARKET AND PRINCIPLES FOR SUCH SERVICE**

SECTION ONE

General Provisions

Purpose

ARTICLE 1- (1) The purpose of this Directive is to regulate the principles on clearing, risk, collateral, and default management service to be provided by İstanbul Takas ve Saklama Bankası Anonim Şirketi in Türkiye Ürün İhtisas Borsası ELUS Market.

Scope

ARTICLE 2- (1) This Directive involves matters on membership, clearing, collateral, default, discipline, income, and other matters concerning clearing, risk, collateral, and default management service to be provided by İstanbul Takas ve Saklama Bankası Anonim Şirketi in Türkiye Ürün İhtisas Borsası ELUS Market.

Basis

ARTICLE 3- (1) This Directive was issued on the grounds of article 77 of the Capital Markets Law no. 6362 of 6/12/2012, General Regulation on Establishment and Working Principles of Central Clearing Agencies issued in the Official Gazette no. 28662 of 30/5/2013, İstanbul Takas ve Saklama Bankası A.Ş. Central Clearing Regulation issued in the Official Gazette no. 28711 of 18/7/2013, Regulation on Principles and Procedures for Establishment, Operation, and Audit of Turkish Commodity Exchange issued in the Official Gazette no. 30150 of 10/8/2017 and the the Regulation on Intermediation Activities and Oversight and Audit of Intermediaries in Turkish Commodity Exchange issued in the Official Gazette no. 30751 of 20/4/2019 .

Definitions and Abbreviations

ARTICLE 4- (1) The following terms in this Directive have the meanings provided next to them;

- a) **Stock Exchange:** Türkiye Ürün İhtisas Borsası A.Ş. (Turkish Commodity Exchange),
- b) **Exchange Membership Collateral:** Collateral received from UPAKs for redemption in case of a damage and failure to fulfill their subscription, commission other obligations in time,
- c) **Electronic Registration Agency/EKK:** Merkezi Kayıt Kuruluşu Anonim Şirketi, which is liable to ensure issuance of electronic product certificate records on the system, and to monitor all rights and obligations, as well as transactions, associated with these bonds on records with respect to parties,
- ç) **Electronic Product Certificate (ELUS):** Electronic records generated by the licensed storage entity through EKK system pursuant to the Electronic Record Rules,

- d) **Electronic Letter of Guarantee (E-Letter of Guarantee):** Letter of guarantee generated on electronic media with secure electronic signature pursuant to standards and rules established by TÜRİB, issued by banks and submitted to Takasbank on behalf of TÜRİB,
- e) **Guarantee Fund:** Guarantee Fund defined in the Regulation on Principles and Procedures for Establishment, Operation, and Audit of Turkish Commodity Exchange,
- f) **CEO:** CEO of İstanbul Takas ve Saklama Bankası Anonim Şirketi,
- g) **Licensed Storage:** Licensed storage entities engaged in storage of agricultural products, having license certificates pursuant to the Law no. 5300 on Licensed Storage of Agricultural Products dated 10/2/2005, which entered into agreements with the Exchange,
- ğ) **Central Clearing Regulation:** İstanbul Takas ve Saklama Bankası A.Ş. Central Clearing Regulation,
- h) **Position:** Clearing debts and receivables arising due to transactions performed on the Market,
- ı) **Procedure:** Implementation principles approved by the CEO, involving procedures on operation and practices under the rules and principles set forth in the Directive,
- i) **System:** Takasbank system, where clearing, risk, collateral, and default management for transactions, carried out in the Market, is performed,
- j) **Settlement:** The entirety of processes that ensure transfer of funds and/or assets between parties to the transaction by the clearing center through performance of obligations, arising due to transactions performed on TEP, by clearing center member institutions in determined periods and terms,
- k) **Takasbank:** İstanbul Takas ve Saklama Bankası Anonim Şirketi,
- l) **Clearing House:** İstanbul Takas ve Saklama Bankası A.Ş., appointed as the clearing house by TÜRİB Board of Directors,
- m) **Clearing Member/Member:** UPAK that performs clearing of transactions performed on the Market or investment institutions defined in clause (v) of paragraph 1 of article 3 of the Capital Markets Law, which is permitted to offer clearing and custody services to UPAKs pursuant to the Exchange legislation and which fulfill Takasbank Clearing Membership Conditions within the scope of the Procedure to perform clearing of transactions,
- n) **Compensation Fund:** Licensed Storage Compensation Fund,
- o) **Guarantee:** Transaction collateral, received from the clearing member for fulfillment of obligations arising from market transactions, and commission collaterals, received to cover Exchange commissions and fees, as well as other obligation deficiencies,
- ö) **Product Market Intermediary Institution (UPAK):** Product market intermediary institution, which received operating permit from the Ministry and accepted as a member by the Exchange pursuant to the provisions of the Regulation on Intermediation Activities and Oversight and Audit of Intermediaries in Turkish Commodity Exchange,
- p) **Takasbank Membership Collateral:** Collateral received from clearing members for redemption in case of failure to fulfill their subscription, fee, commission, and other obligations to Takasbank in time,

r) **TEP/Market:** TÜRİB ELUS Market,

s) **Directive:** This Directive on Central Clearing Service to be Conducted by İstanbul Takas ve Saklama Bankası A.Ş. in Türkiye Ürün İhtisas Borsası A.Ş. ELUS Market and Principles for Such Service,

ş) **Board of Directors:** Takasbank Board of Directors

ifade eder.

SECTION TWO

Principles for Membership

Membership

ARTICLE 5- (1) UPAKs that fulfill the conditions stipulated in article 6 of this Procedure and institutions that are authorized by the Exchange to offer clearing and custody services to UPAKs pursuant to the Exchange legislation so that transactions are cleared, can become members of Takasbank by becoming clearing members in the Market pursuant to this Directive.

Membership Conditions

ARTICLE 6- (1) The following membership conditions must be fulfilled by institutions specified in article 5 to receive clearing, risk, collateral, and default management services for the Market:

- a) Submission of a letter on authorization by the Exchange to UPAKs to provide clearing and custody services,
- b) Signing and submission of Market clearing membership contract and pre-contractual information form, contents of which are determined by Takasbank,
- c) Taking necessary measures to ensure establishment and operation of technical infrastructure, determined and announced to members by Takasbank to perform transactions with Takasbank,
- ç) Opening accounts determined by Takasbank,
- d) Submission of other information and documents to be requested by the Takasbank.

Commencement of operations by Members

ARTICLE 7- (1) Institutions that will apply for membership must apply to Takasbank with information and documents that certify fulfillment of conditions required for membership in the Directive, and deliver information and documents specified in article 10 of the Central Clearing Regulation, as well as membership contract and pre-contractual information form, to Takasbank.

(2) Takasbank shall assess applications in terms of whether conditions required in article 6 are fulfilled. In order for an institution, membership application of which has been accepted, to commence its operations with Takasbank, it must deposit membership fee and membership collateral and authorize the personnel to be

performing transactions on behalf of the member on Takasbank system following notification of approval of the membership application.

Obligations of members

ARTICLE 8- (1) Members must observe the following matters:

- a) To act in compliance with this Directive and other applicable legislation, as well as all principles and rules determined in respect of provided service,
 - b) To act in line with the principles of goodwill and integrity to its clients and other members,
 - c) To observe system periods determined by Takasbank,
 - ç) To fulfill fee, commission, and other obligations, which are required by Takasbank, in due time,
 - d) To provide all kinds of information and document to be requested in respect of matters to be deemed necessary by Takasbank in respect of businesses and transactions within the scope of this Directive, and to offer all kinds of support during inspections to be performed by Takasbank officials,
 - e) To accommodate system changes to be made by Takasbank in determined periods and to participate in testing,
 - f) To fulfill other obligations under this Directive in due time and completely.
- (2) If any member estimates that they shall partially or completely fail to fulfill their obligations, they should notify the matter promptly to the Exchange and Takasbank with any authenticating information and document, which contain the situation, as well as its reasons. Such notification shall not prevent Takasbank from taking measures determined in the Directive.
- (3) Members are responsible for fulfillment of all obligations concerning transactions performed within the scope of operations regulated under the Directive, as well as actions of their employees within the scope of their duties.
- (4) Members perform transactions by means of remote access, using usernames and passwords allocated to their authorized personnel. The member is responsible for transactions performed on the system using the allocated password and the use of password by unauthorized individuals.
- (5) If the system is inaccessible, transactions may be performed by Takasbank pursuant to written instructions to be given by entities with the authority to represent the member.

Restriction of Member operations

ARTICLE 9 – (1) Operations of Members within the scope of this Directive can be restricted by Takasbank under the following circumstances.

- a) Restriction or provisional interruption of operations of the Market, where services are provided, in accordance with article 13 of the Central Clearing Regulation,
- b) Failure to fulfill obligations determined in the Directive, the Procedure, and the membership contract,

- c) Detection of issues such as protestation, attachment, or interim injunction, provisional or permanent suspension of activities, cancellation of relevant operating permit, prohibition of performing transactions associated with assets traded on the Market for any reason, presence of a gradual liquidation or bankruptcy order regarding the member,
 - ç) Notification by the Exchange that Exchange memberships of UPAKs are suspended or canceled or authorizations granted by the Exchange to offer clearing services are withdrawn.
- (2) If either circumstance specified in this article occurs, Takasbank may decide to partially or fully liquidate existing positions of the Member pursuant to the provisions of article 20 of the Directive.
- (3) If operations of the member are restricted due to the matters specified in this article, the situation is promptly notified to the Exchange.

Termination of Membership

ARTICLE 10- (1) Membership can be terminated pursuant to the applicable provisions of article 13 of the Central Clearing Regulation.

SECTION THREE

Clearing Principles

Responsibility of Takasbank

ARTICLE 11- (1) Takasbank is not responsible for liabilities of members to the Exchange and other members, with the exception of liabilities it assumes under this Directive in respect of clearing, risk, collateral, and default management services.

General principles for clearing

ARTICLE 12- (1) Clearing operations are performed by means of Takasbank system.

(2) Members access Takasbank system and perform their transactions using the infrastructure provided by Takasbank. Specifications of systemic messaging to be established between Members and Takasbank and message contents are determined by Takasbank and announced to Members.

(3) Rights and liabilities of members, arising from their transactions subject to clearing, are finalized on account through accounts determined by Takasbank.

(4) Takasbank does not provide any guarantee in terms of finalization of transactions on the date of clearing and in due time. Finalization of clearing transactions in time depends on the condition of timely fulfillment by members of their obligations.

(5) Obligations concerning transactions performed in the Market are fulfilled on the date of clearing, using relevant clearing accounts. Matters concerning clearing accounts are regulated in the Procedure.

- (6) In all activities and transactions to be performed pursuant to Central Clearing Regulation and this Directive, Takasbank addresses only the relevant Member, regardless of whether transactions belong to clients of Members.
- (7) Delivery versus payment principle is applied in clearing transactions. Clearing receivables of members, who fail to fulfill their clearing obligations, are not paid.
- (8) Based on the trading contracts reported by the Exchange and the type of clearing in the contracts, multilateral netting on the basis of Clearing Member and ELUS Borsa, as well as direct contract-based clearing on the basis of net clearing or contract-based clearing, are performed.
- (9) Under net clearing, multilateral netting method must be exercised on the basis of ELUS or transaction currency in calculation of net debt or receivable amount in transactions performed in the Market. Cash receivables or debts are determined against net ELUS debts or receivables found as a result of netting.
- (10) In line with the preference of the Exchange, transactions performed in the market may be subject to contract-based clearing between two members without performance of netting. Principles for contract-based clearing practice are set forth in the Procedure.
- (11) Clearing debts must be paid by the members. Relevant implementation principles are set forth in the Procedure.
- (12) Receivable distribution procedures are performed automatically in consideration of clearing pool balance and remaining liabilities of members at the time of clearing.
- (13) Clearing is collectively finalized in intervals determined by Takasbank so that the maximum number of records are cleared.
- (14) Under net clearing method, liabilities may also be fulfilled partially, while Takasbank may perform partial clearing against partially fulfilled liabilities at particular times.
- (15) Partial debt payment cannot be made under contract-based clearing method.
- (16) Compensation fund share, Exchange service and registration fee, licensed storage entity storage and wastage fee, and other fees determined by the Exchange are collected from Market clearing receivables and/or relevant accounts of members, and transferred to the account of the relevant institution in Takasbank.

Clearing date and periods

ARTICLE 13 - (1) Clearing date and periods are set forth in the Procedure by consulting the Exchange. The provision of paragraph 2 of article 24 of the Central Clearing Regulation is reserved.

Currency

ARTICLE 14 - (1) Transaction currency is used in payment of cash liabilities arising from clearing transactions.

SECTION FOUR

Principles for Risk And Collateral Management

Risk management

ARTICLE 15 - (1) Risk management in the Market is performed by Takasbank pursuant to the principles established by consulting the Exchange. Rules on risk management are set forth in the Procedure.

(2) Clearing positions, guarantee fund contributions, and collaterals in portfolio and client accounts opened by members in Takasbank are updated at least at the end of every business day by Takasbank.

(3) A margin call is made for accounts with insufficient collateral as a result of update. Margin calls are made by means of member screens provided by Takasbank and/or reporting. In the margin call is sent through the System, it is deemed that the member received the call without the need for any further warning and notice. Responsibility of the member starts as soon as the margin call, made by Takasbank, reaches the member.

Exchange Membership Collateral

ARTICLE 16 – (1) Membership collateral is received from UPAKs for exchange membership. Exchange Membership collateral amount is determined by the Exchange and deposited in TRY to the relevant collateral account of the UPAK in Takasbank.

Principles for transaction and commission collateral

ARTICLE 17 – (1) Transaction collateral is demanded from members to cover risks arising from transactions performed on the Market. Confidence levels and holding periods to be determined in the Procedure, no less than 99% as confidence level and 2 days as holding period, shall be used in determination of parameters to be used in calculation of transaction collateral.

(2) Portfolio-based collateralization method is used in calculation of transaction collateral requirements. Principles and procedures for collateralization method and types of collateral are explained in the Procedure.

(3) Principles and procedures for deposit, withdrawal, and exchange of assets that can be accepted as collateral, as well as periods for these, are determined in the Procedure.

(4) Members may be required to establish commission collateral for management of the risk of failure to cover Exchange commissions and fees, as well as other liabilities, arising from transactions. Principles and procedures for such collateral are set forth in the Procedure.

Collateral valuation coefficients

ARTICLE 18- (1) Parametric, non-parametric, or simulation-based statistical methods approved by Takasbank are used in calculation of valuation coefficients, reflecting deduction rates applicable to collaterals. Credit risk, maturity, volatility under extraordinary market conditions, liquidity, and currency risk, if available, of the relevant asset are taken into consideration of collateral valuation coefficients.

(2) Statistical confidence level to be used cannot be less than 99.50% and liquidation period to be used cannot be shorter than 2 business days in calculations to be made. Historic data to be used in calculations must not be shorter than 1 year. Valuation coefficients for assets, for which there is not enough or any historic data, are determined in comparison with the coefficients calculated for assets with similar characteristics.

(3) Valuation coefficients, reflecting deduction rates to be used in calculation of collateral values of assets to be deposited as collateral, are explained in the Procedure.

Assets to be accepted as collateral and composition limits

ARTICLE 19- (1) Members may use the following assets to fulfill their collateral obligations.

- a) Cash Turkish Lira (TRY)
- b) Foreign Currency (USD, EUR, GBP)
- c) Electronic Letter of Guarantee (TRY)

(2) Implementation principles for the collateral valuation process are set forth in the Procedure.

(3) Prices determined by Takasbank are used to ensure that assets, accepted as collateral, are valued at current market prices. Implementation principles for determination of collateral values are explained in the Procedure.

Redemption of collaterals

ARTICLE 20- (1) Collaterals are redeemed in the order to be determined by the Exchange in fulfillment of liabilities to other members, Exchange, compensation fund, and licensed storage due to clearing transactions of the Member.

(2) In case of redemption of receivables from collaterals due to default of the Member or reasons stipulated in provisions of the applicable legislation or contract, Takasbank shall be entitled to redeem receivables from the collateral or set off the value of such instruments against liabilities of the debtor without the obligation to fulfill any prerequisite such as serving any warning or notice, granting any period, obtaining permission or approval from any judicial or administrative authority, liquidating the collateral through auction or by any other means.

(3) Takasbank shall return collaterals, together with rights if any, upon request of the Member, on the conditions that the liabilities are fulfilled.

Accruing interest on cash collaterals

ARTICLE 21 - (1) Takasbank shall accrue interest on cash Turkish Lira collaterals, established by Members, under the best conditions possible pursuant to the principles determined in the Procedure, in consideration of credit risk and liquidity conditions, after deduction of the portion to be established as required reserve. Interest accrual shall be made within Takasbank limits.

(2) Tax and other legal liabilities, as well as Takasbank commission, are deducted from gross interest amounts obtained as a result of interest accrual.

Takasbank Membership Collateral

ARTICLE 22- (1) Clearing Members shall deposit the membership collateral determined by Takasbank Board of Directors to compensate losses that might arise in case of the failure to fulfill liabilities such as subscription, fee, commission, and other liabilities to Takasbank in the granted period. Membership collateral shall be deposited in TRY.

(2) If members fail to fulfill their obligations under paragraph 1, Takasbank shall collect the relevant amount from the membership collateral. After the collection, the relevant Member shall top up the membership collateral to the amount specified in paragraph 1 within 3 business days. If the shortfall amount is not topped up, the relevant amount is collected ex officio from the relevant member.

(3) If membership is terminated, membership collateral is returned on the condition that all liabilities of the member to Takasbank are settled.

(4) Membership collateral is increased every year at the rate of revaluation.

SECTION FIVE

Principles for Default Procedures

General Principles

ARTICLE 23- (1) If the following circumstances occur, the member in question is considered to have gone into default and default provisions shall be applicable without the need for a further notice:

a) Failure to fulfill end-of-day additional collateralization liabilities calculated by Takasbank within the period determined in the Procedure.

b) Failure to fulfill the liability on market and commission clearing transactions by the end of the hour determined in the Procedure.

c) Decision to have liabilities of the member settled by Takasbank pursuant to article 20 of the Directive.

(2) In case of default, Takasbank may not permit the member to withdraw its collaterals in relevant accounts in consideration of the default amount. Takasbank may request the Exchange to prevent order transmission by UPAK through accounts of the member in consideration of the default amount.

(3) Takasbank may grant the member a period at the latest by the time determined in the Procedure on the business day following the date of default to remedy the default condition. If the default is not remedied by the end of granted period, Takasbank may request the Exchange to transmit an order to the Market on behalf

of the member to close the position gap occurring due to default and perform a transaction with same-day value (T+0). Transaction collateral of the member can be used in addition to receivables frozen against clearing debt so that the order can be fulfilled.

(4) Default interest is charged unless clearing, collateral and guarantee fund liabilities are fulfilled in periods determined in the Procedure.

(5) Pursuant to article 33 of the Central Clearing Regulation, aggrievement payment for collected default penalty is made pursuant to the procedure determined in the Procedure.

(6) Default management process and matters concerning ELUS and cash defaults are determined in the Procedure.

(7) Default provisions do not apply in case of the failure to fulfill obligations due to reasons caused by the Exchange, Takasbank, MKK, or TCMB.

Default Interest

ARTICLE 24- (1) If the member, which goes into default by failing to fulfill clearing, commission, or collateral liabilities in time, fails to fulfill its liability within the hour specified in the Procedure on the clearing date, a default interest equivalent to the amount of default amount to be calculated on the basis of coefficients determined in the Procedure.

(2) Default interest coefficient can be differentiated for liabilities fulfilled after the final hour determined on the clearing date but still within the same day.

(3) If an extension is granted to the defaulting Member to remedy the default, the moment of default is taken into consideration in calculation of default interest.

(4) If the member goes into default, Takasbank notifies the calculated default interest on electronic environment to the Member on the business day following the day when the additional collateralization liability is fulfilled with delay. Default interest is calculated in Turkish Lira also for liabilities in foreign currencies. Buying rates of exchange, announced by TCMB, are used in conversion of the relevant foreign currency to Turkish Lira.

(5) A lower limit may be applied to the default amount to be collected. In the case of such application, minimum default amount is determined in the Procedure.

(6) A lower limit may be applied in respect of the default base. In the case of such application, minimum default base is determined in the Procedure.

(7) In case any loss, exceeding default interest, has occurred due to the failure to partially or fully discharge the liability, such loss is compensated by the Member in default.

(8) Default interest is paid at the latest within one business day as of the accrual date. If the default interest has not been paid in such period, the amount in question is directly collected from the free current account of the Member in Takasbank. If such account does not contain a sufficient amount of cash, collaterals of the member are liquidated. Takasbank right of exchange, set-off, and retention on all assets, rights, and receivables of the Member in its possession.

SECTION SIX

Miscellaneous Provisions

Fees and Commissions

ARTICLE 25 - (1) Fees for services within the scope of this Directive are determined by Takasbank and announced to members by consulting the Exchange.

(2) Fees are accrued during transactions or monthly, according to the nature of transaction, and collected from accounts of the member in Takasbank.

(3) Commission amounts, against which no objections are raised within 3 business days from the date of accrual, shall be deemed to have been accepted.

(4) Commissions that are not paid in due time are directly collected from free current accounts of members.

Disciplinary Provisions

ARTICLE 26- (1) Disciplinary provisions, set forth in section 7 of the Central Clearing Regulation, are applicable to Members that do not comply with the liabilities determined in this Directive. This situation is also notified to the Exchange in writing.

Measures to be taken in exceptional circumstances

ARTICLE 27- (1) Takasbank is entitled to determine and implement measures to be taken in case of the presence of exceptional circumstances, under which Market clearing transactions are estimated to be impacted negatively. In such cases, it is entitled to take necessary measures in accordance with article 62 of the Central Clearing Regulation. This situation is also promptly notified to the Exchange in writing.

Provisions applicable in the absence of stipulation in the directive

ARTICLE 28 - (1) Provisions of the Central Clearing Regulation shall be implemented in case of circumstances that are not stipulated in this Directive.

Effect

ARTICLE 29 - (1) The Directive takes effect on the date of its issuance.

Conduct

ARTICLE 30 - (1) The provisions of this Directive are implemented by the Board of Directors.