

Istanbul, 12/11/2020

General Letter: 1658

Equities and Debt Securities Clearing & Settlement Team

Subject: Precious Metals Swap Market

Related Parties: Banks

Brokerage Houses

Dear General Manager,

As it is known, Swap Market (Market), which contributes to the use of financial products in risk management strategies and offers an alternative to investors' preferences to acquire foreign currencies directly, was established on 01.10.2018 at Borsa İstanbul A.Ş. (Borsa İstanbul) and the Central Counterparty (CCP) service is provided by Takasbank to the transactions conducted in the Market.

This once, Borsa Istanbul A.Ş. was decided the Precious Metals Swap Market (Market) to be established within the Swap Market in order to facilitate the exchange of precious metals and currencies with each other and started operations on 16.11.2020.

In this context, the "Istanbul Clearing, Settlement and Custody Bank A.Ş. - Borsa Istanbul A.Ş. Swap Market Directive on Clearing and Central Counterparty Service Principles" has been updated and approved by the Capital Markets Board of Turkey in the meeting dated 12.11.2020 numbered 71. According with this approval, it's been deemed appropriate to provide CCP service by Takasbank in the Market.

Within this context, further details about membership, system rules and regulations, fees and commissions are here below.

A. Membership

Our members who intend to conduct transactions in the Market are required to obtain the revised "Borsa Istanbul Swap Market Center Counterparty and Clearing and Settlement Operations Participant Agreement" and "Preliminary Information Form" from Takasbank Member Relations Department and submit them to our Bank. The signing of the agreements and documents in question by the member officials who have the widest authority according to the signature circular in transactions with Takasbank (with wet signature) is obligatory. Membership application documents will be available on Takasbank website. (https://www.takasbank.com.tr/tr/uyelik/swap-piyasasi) In case the new contract is not delivered, the relevant members will not be able to trade in the Precious Metals Swap Market, and the failure to sign a new contract will not prevent members who are currently authorized to trade in the Money Swap Market from using this authority.

B. System Rules and Regulations

"Istanbul Clearing, Settlement and Custody Bank A.Ş. - Borsa Istanbul Swap Market Directive on Clearing and Central Counterparty Service Principles", which covering the principles to be bound by Takasbank and its members regarding membership, clearing, settlement, risk management and default processes and coming into effect with the opening of the market was published in the website of Takasbank via (https://www.takasbank.com.tr/documents/yonergeler/bas-swap-piyasasi-takas-ve-mkt-yonergesi-ngilizce061120.pdf)

In addition, the "Istanbul Clearing, Settlement and Custody Bank A.Ş. - Borsa Istanbul Swap Market Directive on Clearing and Central Counterparty Service Procedure", which includes details of the market's operating rules, was updated and uploaded to the Takasbank website via (https://www.takasbank.com.tr/documents/prosedurler/bas-swap-piyasasi-takas-ve-mkt-prosedurungilizce.pdf)

The comparison tables that showing the changes on Directive and Procedure are attached.



C. Fees and Commissions

The fee and commission tariff applied to the current Swap Market will also be applied to the aforementioned market. The relevant tariff was approved by the Capital Markets Board in the meeting dated 12.11.2020 and numbered 71.

About market, you can forward your messages to abovementioned e-mail addresses;

- For your questions about the membership, uye@takasbank.com.tr,
- For your questions about the clearing and settlement operations bat@takasbank.com.tr,
- For your questions about risk calculation, the collateral and the guarantee fund mkt@takasbank.com.tr

Respectfully submitted for your kind information and further action. Sincerely Yours,

Annex:

- 1- Change Comparison Table of Directive
- 2- Change Comparison Table of Procedure



İSTANBUL TAKAS VE SAKLAMA BANKASI A.Ş.

BORSA ISTANBUL A.Ş. DIRECTIVE ON SWAP MARKET CLEARING AND SETTLEMENT AND CENTRAL COUNTERPARTY SERVICE PRINCIPLES

Change Comparison Table

Article Content – Old Version	Article Content – New Version
Definitions and Abbreviations	Definitions and Abbreviations
ARTICLE 4	ARTICLE 4
New Definitions	h) Precious Metal: Precious metals defined in resolution 32 and whose standards are determined, s) 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. v) 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.
Membership ARTICLE 5 – (1) The banks satisfying the conditions set forth in article 6 of the Directive may become a member to the CCP service to be provided by Takasbank for the transactions conducted in the Market provided that they are authorized by the Board of Directors.	Membership ARTICLE 5 – (1) The investment institutions meeting the requirements in article 6 of the Directive and the other institutions authorized by Borsa İstanbul to trade in the market The banks satisfying the conditions set forth in article 6 of the Directive may become a member to the CCP service to be provided by Takasbank for the transactions conducted in the Market provided that they are authorized by the Board of Directors.
CCP Membership conditions ARTICLE 6	CCP Membership conditions ARTICLE 6





f) To be able to become a CCP Member;

- i. They must have a limited or general custody service authorization pursuant to the relevant legislation.
- ii. They must have a minimum equity capital of 50.000.000 TL.
- iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank.

f) For the brokerage houses to become a direct CCP Member;

- i. They must have a limited or general custody service license pursuant to the relevant legislation,
- ii. They must have a minimum equity capital of 10.000.000 TRY,
- iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank,

g) For the banks to become a direct CCP Member;

f) To be able to become a CCP Member;

- i. They must have a limited or general custody service authorization pursuant to the relevant legislation.
- ii. They must have a minimum equity capital of 50.000.000 TL.
- iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank.

Membership application and admission ARTICLE 7-

- c) Document to be received from the Exchange, which verifies that the banks applying for a direct CCP membership are operating in the Market
- (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 collateral,
- b) Deposit the Guarantee Fund contribution,
- c) Authorize the personnel who will trade on behalf of the Member in Takasbank system.

Membership application and admission ARTICLE 7-

- c) Document to be received from the Exchange, which verifies that the <u>investment institutions</u> applying for a direct CCP membership are operating in the Market
- (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,
- **cb**) Deposit its Guarantee Fund contribution,
- ce) Authorize the personnel who will trade on behalf of the Member





	in Takasbank system.
Marketplaces and platforms to which clearing and settlement and CCP service are provided New ARTICLE	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 thereof 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) The Board of Directors of Takasbank may, if deemed appropriate by the Board, and upon request of the Exchange or by obtaining the Exchange's opinion, take a decision to provide only the clearing and settlement service and not to provide the CCP service or to terminate the CCP service for some of the marketplaces or platforms already existing or to be newly established within the Market or for some precious metals already traded.
	(4) The clearing and settlement operations for the marketplaces/platforms and/or precious metals/contracts to which the CCP service will not be provided based on the Board's affirmative opinion shall be performed by Takasbank in accordance with the provisions of Istanbul Settlement and Custody Bank Inc. Central Clearing and Settlement Regulation and in line with the principles and procedures as perthe rulesstipulated in the Directive and the details thereof shall be stipulated by the procedures. (5) Takasbank has no guarantee for completion of settlement of the marketplaces/platforms and/or precious metals/contracts to which CCP service is not provided. 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 may 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 foreign currency and/or 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. The principles and procedures for default management
	shall be stipulated in the Procedure.
Settlement date and period	Settlement date and period
ARTICLE 12-	ARTICLE 12-
(6) The obligations related to the transactions conducted in the Market	(6) <u>Cash and precious metal settlement obligations</u> The obligations
shall be fulfilled within the hours designated in the Procedure.	related to the transactions conducted in the Market shall be fulfilled
Otherwise the default provisions shall be applied.	within the hours designated in the Procedure. Otherwise the default
	provisions shall be applied.
Netting	Netting
ARTICLE 15- (1) Multilateral netting principle under the breakdown	ARTICLE 15- (1) <u>In calculating the net payable or receivable amount</u>
of client/portfolio and currency is adopted in the market for the	ARTICLE 15- (1) <u>In calculating the net payable or receivable amount</u> for the transactions conducted in the Market, employing multilateral
	for the transactions conducted in the Market, employing multilateral netting method on currency and precious metal basis by observing
of client/portfolio and currency is adopted in the market for the	for the transactions conducted in the Market, employing multilateral
of client/portfolio and currency is adopted in the market for the	for the transactions conducted in the Market, employing multilateral netting method on currency and precious metal basis by observing customer/portfolio segregation is essential. (2) The marketplaces/platforms and/or precious metals to which CCP
of client/portfolio and currency is adopted in the market for the	for the transactions conducted in the Market, employing multilateral netting method on currency and precious metal basis by observing customer/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
of client/portfolio and currency is adopted in the market for the	for the transactions conducted in the Market, employing multilateral netting method on currency and precious metal basis by observing customer/portfolio segregation is essential. (2) The marketplaces/platforms and/or precious metals to which CCP





Payment versus payment principle

ARTICLE 16- (1) In the clearing and settlement operations, the payment versus payment principle shall be applied. Pursuant to the principle, the settlement receivables of the members failing to fulfill their settlement obligations on the settlement date shall not be paid.

Market clearing and settlement operations ARTICLE 17-

- (2) On the maturity and value date of the transaction settlement obligations and receivables are calculated under the breakdown of client and portfolio transactions of the member.
- (3) The obligations of the members arising from their transactions subject to the clearing and settlement shall be fulfilled until the settlement date cut-off time by way of payment by the members by using the debt coverage account opened at Takasbank for each member and announced in the Procedure.
- (4) The obligations shall be fulfilled by the members by using the Turkish Lira and foreign currency settlement accounts at Takasbank or the correspondent bank.
- (5) The rights and obligations of the members arising from their transactions subject to settlement shall be concluded on account by using the relevant accounts designated by Takasbank.

Multilateral netting principle under the breakdown of client/portfolio and currency is adopted in the market for the calculation of the netted obligations and receivables.

Payment versus payment Clearing and settlement principles

ARTICLE 16- (1) In the clearing and settlement operations, the delivery versus payment and the payment versus payment principles shall be applied. Pursuant to the principle, the settlement receivables of the members failing to fulfill their settlement obligations on the settlement date shall not be paid.

Market clearing and settlement operations ARTICLE 17-

- (2) On the maturity and value date of the transaction settlement obligations and <u>cash/precious metal</u> receivables are calculated under the breakdown of client and portfolio transactions of the member.
- (3) The obligations of the members arising from their transactions subject to the clearing and settlement shall be fulfilled until the settlement date cut-off time by way of payment by the members...by using the debt coverage account opened at Takasbank for each member and announced in the Procedure. Members with precious metal debts fulfill their obligations by using their precious metal accounts opened at Borsa Istanbul, and members with cash debts using the Turkish Lira and foreign currency cash debt coverage accounts opened at Takasbank (4) The obligations shall be fulfilled by the members by using the Turkish Lira and foreign currency settlement accounts at Takasbank or the correspondent bank.
- (45) The rights and obligations of the members arising from their transactions subject to settlement shall be concluded on account by using the relevant accounts designated by Takasbank.
- (56) It is possible to partially fulfill the settlement obligations and the receivable distributions are performed partially by Takasbank for the obligations fulfilled partially.





- (6) It is possible to partially fulfill the settlement obligations and the receivable distributions are performed partially by Takasbank for the obligations fulfilled partially.
- (7) Transactions in the market are monitored in two separate risk groups; in the "Member Risk Group" for the proprietary portfolio of the members and in the "Customer Risk Group" for the transactions conducted on behalf of the customers.
- (8) 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".
- (9) If the member to whom the release of receivable is made has any debt to another risk group, the released receivables shall be offset against the debt of the risk group to which the member is indebted.
- (10) The release of receivable 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.
- (11) The settlement receivables distributed between the receivable distribution cut-off time specified in the Procedure and the post-EFT closing time shall be transferred to the recipient Bank's required reserve account at CBRT.

- (67) Transactions in the market are monitored in two separate risk groups; in the "Member Risk Group" for the proprietary portfolio of the members and in the "Customer Risk Group" for the transactions conducted on behalf of the customers.
- (78) 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".
- (89) If the member to whom the release of receivable is made has any debt to another risk group, the released receivables shall be offset against the debt of the risk group to which the member is indebted.
- (910) In case the members who have not fulfilled their collateral obligation will have clearing receivables in Turkish Lira and foreign currency, The release of receivable of these 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.
- (104) The settlement receivables distributed between the receivable distribution cut-off time specified in the Procedure and the post-EFT closing time shall be transferred to the recipient Bank's required reserve account at CBRT.

Variation margin settlement operations ARTICLE 18-

(2) The variation margin shall be calculated in Turkish Lira at the end of each day to neutralize the internal value of the swap transaction

Variation margin settlement operations ARTICLE 18-

(2) The variation margin shall be calculated in Turkish Lira at the end of each day to neutralize the internal value of the swap transaction





Clearing House of Turkey	
conducted in the Market and the settlement operations shall be performed in Turkish Lira. In the calculations, the exchange rate computed based on the criteria stipulated in the procedure shall be used. In determining such criteria, the opinion of the Exchange shall be obtained. (8) 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.	conducted in the Market and the settlement operations shall be performed in Turkish Lira. In the calculations, the exchange rate and the precious metal price computed based on the criteria stipulated in the procedure shall be used. In determining such criteria, the opinion of the Exchange shall be obtained. (8) 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 for which CCP service is not provided cannot be netted with other contracts.
Account Structure ARTICLE 19-	Account Structure ARTICLE 19-
(1) All members intending to trade in the Market are obliged to open at Takasbank their cash, trade margin and guarantee fund accounts required for conducting their transactions.	(1) All members intending to trade in the Market are obliged to open at Takasbank their cash, trade margin and guarantee fund accounts at Takasbank, the precious metal accounts at Borsa İstanbul A.Ş.required for conducting their transactions.
(2) The relevant accounts shall be opened automatically for the members holding an account at Takasbank.	(2) The relevant accounts shall be opened automatically for the members holding an account at Takasbank.
Account Types ARTICLE 19A New ARTICLE	Account Types ARTICLE 19A (1) The position and collateral accounts associated with the trading accounts can be opened at Takasbank in two different types: the "Customer" and the "Portfolio". The portfolio account is the account in which the transactions conducted by the member for its own portfolio is monitored. Monitoring customer 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.





Clearing House of Turkey	
	(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.
Account Migration	Account Migration
ARTICLE 21-	ARTICLE 21-
New paragraph	(7) For the accounts linked to a member whose membership activities
New paragraph	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.
Risk management	Risk management
ARTICLE 22-	ARTICLE 22-
(5) Rules for the under-collateralized accounts during the pre-trade and	(5) Rules for the under-collateralized accounts during the pre-trade and
at-trade risk management processes and for the transactions of the	at trade risk management processes and for the transactions of the
accounts on which there is a margin call shall be stipulated in the	accounts on which there is a margin call shall be stipulated in the
Procedure.	Procedure.
(8) Default penalty shall be applied for the accounts failing to fulfil their	(8) Default penalty shall be applied for the accounts failing to fulfil
margin obligation until the time designated in the Procedure, and the	their margin obligation until the time designated in the Procedure, and
settlement receivables shall not be distributed in cases when the margin	the settlement <u>cash</u> receivables shall not be distributed in cases when
is failed to be restored.	the margin is failed to be restored.
	(9) In calculating the collateral amount received for clearing and
	settlement in relation to the marketplaces/platforms and/or precious
	metals/contracts to which CCP service is not to be provided in
	accordance with the Board permission, the method and parameters





applied to the marketplaces/platforms and/or precious metals/contracts to which CCP service is provided shall be used. Other principles and procedures for collateral received for clearing and settlement shall be stipulated in the Procedure.

(10) If the difference between the theoretical price calculated by Takasbank and the maturity rate determined by Takasbank at the starting value of swap transactions in the Market is above the ratio/amount determined by Takasbank, it may receive additional collateral from the relevant party, limited to the present value of the difference. The criterion for the determination of the ratio/amount is determined by taking into account the market conditions, the nominal/proportional size of the difference and its share in the collateral accounts.

Risk limits ARTICLE 23-

(1) In the Market to which it provides CCP service, 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 to which CCP service is provided. 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.

Risk limits

ARTICLE 23-

(1) In the Market to which it provides CCP service, 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 to which CCP service is provided. 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. It is notified to the members as notional amount.

Initial Margin ARTICLE 24-

(1) An initial margin shall be requested from the Members to cover the risks arising from the positions taken in Borsa Istanbul Swap Market. The initial margin is received at the beginning to cover any exchange rate change that may occur in the Market during the period to be elapsed

Initial MarginCollaterals

ARTICLE 24-

(1) An initial marginThe collateral shall be requested from the Members to cover the risks arising from the positions taken in Borsa Istanbul Swap Market. The initial margincollateral is received at the beginning to cover any exchange rate change that may occur in the





from the moment in which the default occurs to its resolution in the event the member falls into default. In determining the statistical parameters constituting the basis of the initial margin, the confidence levels and holding periods to be designated in the Procedure shall be used provided that they shall not be less than 99% and 2 days respectively. The historical data sets to be used in the volatility calculations should cover, at minimum, the last 12 months' period, if obtainable.

(2) In calculating the margin requirements in the Market, the portfoliobased collateralization method shall be used to ensure taking the risk mitigating effects of the reverse cash flows into account. When the margin requirement is calculated, no netting shall be made between the positions of different risk groups or currency pairs. The implementing principles for the collateralization method shall be explained in the procedure Market during the period to be elapsed from the moment in which the default occurs to its resolution in the event the member falls into default. In determining the statistical parameters constituting the basis of the initial margincollateral, the confidence levels and holding periods to be designated in the Procedure shall be used provided that they shall not be less than 99% and 2 days respectively. The historical data sets to be used in the volatility calculations should cover, at minimum, the last 12 months' period, if obtainable.

- (2) In calculating the margin requirements <u>for the positions which CCP</u> <u>Service is provided</u> in the Market, the portfolio-based collateralization method shall be used to ensure taking the risk mitigating effects of the reverse cash flows into account. When the margin requirement is calculated, no netting shall be made between the positions of different risk groups or currency pairs. The implementing principles for the collateralization method shall be explained in the procedure.
- (3) Positions regarding the marketplaces/platforms and/or precious metals/contracts to which CCP service will not to be provided in accordance with the Board permission shall be monitored in an individual account of the member separately from the positions to which CCP service is provided, and the collateral amount received for settlement shall be calculated over the netted positions in such account. In the valuation of collateral received for settlement, the parameters and assets determined in relation to the marketplaces/platforms and/or precious metals/contracts to which CCP service is provided shall be used.



Assets eligible as collateral and guarantee fund contribution	Assets eligible as collateral and guarantee fund contribution
ARTICLE 25-	ARTICLE 25-
(5) The criteria regarding the assets to be accepted as collateral in the mortgage-backed securities, mortgage-based securities, asset-backed securities and asset-based securities group and the date on which above mentioned assets and Borsa Istanbul A.Ş. shares to be accepted as collateral is determined in the Procedure.	(5) The criteria regarding the assets to be accepted as collateral in the mortgage backed securities, mortgage based securities, asset backed securities and asset based securities group and the date on which above mentioned assets and Borsa Istanbul A.Ş. shares to be accepted as collateral is determined in the Procedure. Removed.
Collateral composition limits	Collateral composition limits
ARTICLE 27-	ARTICLE 27-
Assets Eligible as Collateral	Assets Eligible as Collateral
Standard gold traded on the exchanges	Standard gold traded on the exchanges
Group Limit	Group Limit
Max. % 25	Max. % <u>5025</u>
Collateral monitoring and management	Collateral monitoring and management
ARTICLE 29-	ARTICLE 29-
(1) Collateral associated with the positions held in the risk groups are	(1) Collateral associated with the positions held in the risk groups are
monitored separately in the accounts linked to the member. Any margin	monitored separately in the accounts linked to the member. The
surplus in a risk group cannot be used for closing any margin deficit	
arising from the positions in another risk group nor for resolving any default. The provision of the third paragraph of article 78 of the Law	Any margin surplus in a risk group cannot be used for closing any margin collateral deficit arising from the accounts of the member's
shall be reserved.	own portfolio positions in another risk group nor for resolving any
shan be reserved.	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 debt arising from the margin call	(2) The member is obliged to close its debt arising from the margin call
and its clearing and settlement obligations until the end of the time	and its clearing and settlement obligations until the end of the time
periods set forth in the Procedure. Otherwise the Member shall be	periods set forth in the Procedure. Otherwise the Member shall be
	1 1





Prestorio Programme Control	
receivables, if any, shall not be paid and the default provisions shall be	precious metal receivables, if any, shall not be paid and the default
applied to the Member.	provisions shall be applied to the Member.
Guarantee fund and its general principles	Guarantee fund and its general principles
ARTICLE 33-	ARTICLE 33-
New paragraph	(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
	<u>calculations.</u>
Assets eligible as contribution to the guarantee fund and the	Assets eligible as contribution to the guarantee fund and the
obligation to restore contribution amount	obligation to restore contribution amount
ARTICLE 35-	ARTICLE 35-
Assets Eligible to Guarantee Fund	Assets Eligible to Guarantee Fund
Standard gold traded on the exchanges	Standard gold traded on the exchanges
Group Limit	Group Limit
Max. % 25	Max. % <u>5025</u>
CHAPTER EIGHT	CHAPTER EIGHT
Principles Regarding the Default Procedures	Principles Regarding the Default Procedures for CCP Service-
	Provided Assets
Settlement and variation margin default	Settlement Cash and variation margin default
ARTICLE 38-	ARTICLE 38-
(1) Without prejudice to the thresholds set forth in article 36 of the	(1) Without prejudice to the thresholds set forth in article 36 of the
Central Counterparty Regulation and the market liquidity constraints,	Central Counterparty Regulation and paragraphs 4 and 5 of this article
the financial liability of Takasbank for the defaults occurred on the	and the market liquidity constraints, the financial liability of
value date of the transaction shall be limited to the payment of debt on	Takasbank for the defaults occurred on the value date of the
the settlement date; and should the debt be failed to be paid on the	transactionin the market shall be limited to the payment of debt on the
settlement date, to the payment in accordance with the following	settlement date; and should the debt be failed to be paid on the
principles and procedures depending on the market conditions and	settlement date, to the payment in accordance with the following
Takasbank's liquidity facilities, and further to that, to the mistreatment	principles and procedures depending on the market conditions and
payment to be calculated till the date on which the payment will be	Takasbank's liquidity facilities, and further to that, to the mistreatment
made.	





- (2) 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 funds 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 foreign currency 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 shall be used and the relevant amount shall be paid in the next business day.
- (3) 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.

(4) In the Market, the liability of Takasbank arising from the default against the foreign currencyrecipient party on the start date of the transaction shall be limited to the sum of the foreign currency obtained

- 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.

- (32) In the case of the cash default occurred on the value date of the transaction, iIf 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 funds 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 foreign currency 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 shall be used and the relevant amount shall be paid in the next business day.
- _(3) 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.
- (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





through TL amount subject to the transaction and the pre-trade risk premium amount received for such transaction.

- (5) In the Market, the liability of Takasbank arising from the default against the Turkish Lira recipient party on the start date of the transaction shall be limited to the sum of TL obtained through the foreign currency amount subject to the transaction and the pre-trade risk premium amount received for such transaction.
- (6) If, in the Market, the difference between the theoretical price calculated by Takasbank for the transaction and the exchange rate subject to the transaction on the maturity date is greater than the rate/amount determined by Takasbank on the start date of such swap transaction, Takasbank shall get additional collateral from the relevant party as to be limited to the present value of such difference.

The criteria for designating such rate/amount shall be determined by considering the issues such as the market conditions, the nominal/proportional size of the difference and the share of this difference in the margin accounts, etc.

(7) In case of any default, the default interest shall be charged pursuant to the provisions of article 38. 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 ¾ of the collected default interest amount.

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 Turkish Lira recipient party on the start 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 for such transaction and the guarantee fund of the default member.
- (6) If, in the Market, the difference between the theoretical price calculated by Takasbank for the transaction and the exchange rate subject to the transaction on the maturity date is greater than the rate/amount determined by Takasbank on the start date of such swap transaction, Takasbank shall get additional collateral from the relevant party as to be limited to the present value of such difference.

The criteria for designating such rate/amount shall be determined by considering the issues such as the market conditions, the nominal/proportional size of the difference and the share of this difference in the margin accounts, etc.

- (67) In case of any default, the default interest shall be charged pursuant to the provisions of article 38. 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 34 of the collected default interest amount.
- (78) If the calculated interest amount remains below the minimum default penalty, the payment shall be made over the calculated amount.





Clearing House of Turkey
(8) If the calculated interest amount remains below the minimum default
penalty, the payment shall be made over the calculated amount.
(9) The obligor member shall be obliged to pay such debt together with
its default interest to be calculated in accordance with article 38.

(89) The obligor member shall be obliged to pay such debt together with its default interest to be calculated in accordance with article 38.

(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 38A-New ARTICLE

Precious metal default ARTICLE 38A-

- (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 38. 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 34 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 42.
- (8) Other issues related to the default shall be stipulated by the <u>Procedure</u>

Default interest ARTICLE 39-

(8) If the obligation being defaulted is denominated in a foreign currency, it shall be calculated by taking the foreign currency buying rate announced by the CBRT on the relevant value date as the base. On the other hand, in case it is defaulted in any foreign currency denominated obligation, Takasbank may also decide to calculate the default interest over the haircuts it may determine separately for each

Default interest ARTICLE 39-

(8) If the default liability is in foreign currency, it is calculated on the basis of the foreign currency buying rate announced by the CBRT on the relevant value date, and in terms of precious metal, the precious metal price used in the valuation of the end of day variation margin collateral. If the obligation being defaulted is denominated in a foreign currency, it shall be calculated by taking the foreign currency buying





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Clearing House of Turkey	
foreign currency.	rate announced by the CBRT on the relevant value date as the base. On the other hand, in case it is defaulted in any foreign currency denominated obligation, Takasbank may also decide to calculate the default interest over the haircuts it may determine separately for each foreign currency.
Temporary Provision	Temporary Provision
ARTICLE 48-	ARTICLE 48-
(1) The application of sub-group limits for eligible collateral in the	(1) The application of sub-group limits for eligible collateral in the
Market shall commence on 31/12/2019.	Market shall commence on 31/12/2019.
(2) Sub-Group Limit, set as 40% for mortgage-backed securities,	(2) Sub-Group Limit, set as 40% for mortgage-backed securities,
mortgage-based securities, assetbacked securities and asset-based	mortgage-based securities, assetbacked securities and asset-based
securities, is to be applied as 100% until 31/12/2019.	securities, is to be applied as 100% until 31/12/2019.
(3) Borsa Istanbul A.Ş. shares are considered as collateral while the buy-	(13) Borsa Istanbul A.Ş. shares are considered as collateral while the
back guarantee of Borsa İstanbul remains.	buy-back guarantee of Borsa İstanbul remains.

İSTANBUL TAKAS VE SAKLAMA BANKASI A.Ş.



publication in the Procedure.

(4) The additions to the assets accepted as collateral and revisions

regarding composition limits of these assets become effective after

publication in the Procedure.

(4) The additions to the assets accepted as collateral and revisions

regarding composition limits of these assets become effective after



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

Change Comparison Table

Change Compariso	III TAUC
<u>Article Content – Old Version</u>	Article Content - New Version
Definitions and Abbreviations	Definitions and Abbreviations
ARTICLE 4	ARTICLE 4
New article	k) Precious Metal: Precious metals defined in resolution 32 and whose standards are determined,
	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,
	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.
Membership	Membership
ARTICLE 5 – (1) The Banks satisfying the conditions set forth in article 6 of the Directive may become a member to the CCP service to be provided by Takasbank for the transactions conducted in the Market provided that they are authorized by the Board of Directors.	ARTICLE 5 – (1) The <u>investment institutions</u> meeting the requirements in article 6 of the Directive <u>and the other institutions</u> <u>authorized by Borsa İstanbul to trade</u> 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.
CCP Membership conditions	CCP Membership conditions
ARTICLE 6	ARTICLE 6
g) To be able to become a CCP Member;	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.	iv. They must have a limited or general custody service license pursuant to the relevant legislation,
ii. They must have an equity capital of 50.000.000 TL	v. They must have a minimum equity capital of 10.000.000 TRY,
iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank.	vi. They must hold at least D rating as a result of the internal rating conducted by Takasbank,
	gg) For the banks to become a direct CCP Member;
	i. They must have a limited or general custody service license pursuant to the relevant legislation,
	ii. They must have a minimum equity capital of 50.000.000 TRY,
	iii. They must hold at least D rating as a result of the internal rating conducted by Takasbank,
Membership application and admission	Membership application and admission
ARTICLE 7- (1)	ARTICLE 7- (1)
c) Document to be received from the Exchange, which verifies that the bank applying for a direct CCP membership are operating in the Market.	c) Document to be received from the Exchange, which verifies that the banks investment institutions applying for a direct CCP membership are operating in the Market.
(3) In order to commence its operations with Takasbank, the institution whose membershipapplication is accepted must, within 1 month from the notification that its membership application has been found eligible;	n (3) In order to commence its operations with Takasbank, the





a) Deposit the membership collateral,b) Deposit the Guarantee Fund contribution,	within 1 month from the notification that its membership application has been found eligible; <u>a) Deposit the membership admission fee,</u>
c) Authorize the personnel who will trade on behalf of the Member in Takasbank system.	<u>a)b)</u> Deposit the membership collateral, <u>b)c)</u> Deposit the Guarantee Fund contribution,
	çe_Authorize the personnel who will trade on behalf of the Member in Takasbank system.
Marketplaces and platforms to which clearing and settlement and CCP service are provided	Marketplaces and platforms to which clearing and settlement and CCP service are provided
New article	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.

Settlement date and period

ARTICLE 13-

Transaction type	Time
Settlement start time (*)	14:00
Fulfillment of the Obligation Deadlines (
TL	17:15

Settlement date and period

ARTICLE 13-

Transaction type	Time
Settlement start time (*)	14:00
Fulfillment of the Obligation Deadlines(*)	
TL	17:15





USD	21:00	
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	
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	

USD	21:00	
PRECIOUS METAL	<u>17:</u> 00	
EUR	21:00	
Receivable Transfer Times (*)	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	<u>14:00 –</u> <u>21:00</u>	
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 deadline - Half business day	12:30
Guarantee Fund Contribution deadline	13:00
Guarantee Fund Contribution deadline- Half business day	12:30

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

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

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

Netting

ARTICLE 17- (1) Multilateral netting principle under the breakdown of client/portfolio and currency is adopted in the market for the calculation of netted obligations and receivables.

Netting

ARTICLE 17- (1) Multilateral netting principle under the breakdown of client/portfolio and currency is adopted in the market for the calculation of netted obligations and receivables.

- (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.





Payment versus payment principle

ARTICLE 18- (1) In the clearing and settlement operations, the payment versus payment principle shall be applied. Pursuant to the principle, the settlement receivables of the members failing to fulfill their settlement obligations on the settlement date shall not be paid.

(2) The 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.

Market clearing and settlement operations

ARTICLE 19-

- (2) The obligations regarding the transactions conducted in the Market shall be fulfilled by making debt coverage through Takasbank screens until 17:15 (17:15 included) for TL, until 21:00 (21:00 included) for USD and until 21:00 (21:00 included) for EUR.
- (3) The settlement obligations are monitored in the System on a currency basis and on the basis of two different risk groups;
- a) For the transactions of the members' own portfolio, the "Member Risk Group".

Payment versus payment 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. Pursuant to the principle, the settlement receivables of the members failing to fulfill their settlement obligations on the settlement date shall not be paid.

(2) The <u>cash</u> 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.

Market clearing and settlement operations

ARTICLE 19-

- (2) The obligations regarding the transactions conducted in the Market shall be fulfilled by making debt coverage through Takasbank screens until 17:15 (17:15 included) for TL, until 21:00 (21:00 included) for USD and until 21:00 (21:00 included) for EUR. 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 <u>and precious metal</u> 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





- b) For the transactions conducted to the account of the customers, "Customer Risk Group".
- (6) In order for the receivable distribution to be made, the member must have fulfilled its collateral obligation.
- (8) The 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 current accounts at Takasbank.
- (9) The 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 current accounts at Takasbank.

customers, "Customer Risk Group".

- (6) In order for the receivables distribution in Turkish Lira and Foreign Currency to be made, the member must have fulfilled its collateral obligation.
- (8) The 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 <u>distribution in Turkish Lira and Foreign</u> <u>Currency</u> 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.

Variation margin (P/L) settlement operation

ARTICLE 20-

(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 shall be used.

Variation margin (P/L) settlement operations

ARTICLE 20-

(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 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.





(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.	(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.
Account operations	Account operations
ARTICLE 21- (1) All members intending to trade in the Market are obliged to open at Takasbank their cash, trade margin and guarantee fund accounts required for conducting their transactions.	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.
Account types	Account types
ARTICLE 21A New article	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.
Account migration	Account migration
ARTICLE 23-	ARTICLE 23-
New paragraph	(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.
Risk management	Risk management
ARTICLE 24-	ARTICLE 24-
(4) In the market, pre-trade, at-trade and post-trade risk management processes are applied.	(4) In the market, pre-trade, at-trade and post-trade risk management process are applied. <u>Takasbank receives the opinion of the Exchange in -pre-trade risk management processes.</u>
Initial margin, at-trade and post-trade risk management	Initial margin, at-trade and post-trade risk management
ARTICLE 26	ARTICLE 26
(2) The initial margin shall be collected to remove the impact of any change occurred in the exchange rates during the period to be elapsed until the	(2) The initial margin shall be collected to remove the impact of any change occurred in the exchange rates and the precious





resolution of the default arising in the event the member fails to fulfill it	S
obligations within the time periods set forth in the procedure.	

metal price during the period to be elapsed until the resolution of the default arising in the event of the member fails to fulfill its obligations within the time period set forth in the procedure.

- (4) The initial margin could be differentiated on the basis of the maturity of the transaction, counterparties to trade and the currency. If initial margin 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 currency subject to the depreciation at the end of day risk calculations.
- (4) The initial margin could be differentiated on the basis of the maturity of the transaction, counterparties to trade, <u>precious metal</u> and the currency. If initial margin 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 <u>eurrency asset</u> subject to the depreciation at the end of day risk calculations. <u>Offsetting positions to be taken in different gold or currency swap transactions can be subjected to correlation within themselves.</u>
- (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.
- (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.
- (10) In calculating the margin requirement, no netting shall be made between the positions of the different risk groups and different currency pairs.
- (10) In calculating the margin requirement, no netting shall be made between the positions of the different risk groups, <u>currency/currency and precious metal/currency pairs</u>.

Variation margin and funding cost calculations

Variation margin and funding cost calculations





ARTICLE 27- (1)The variation margin generated by the positions opened during the first value date shall be determined by taking account of the difference between the exchange rate at the transaction and the exchange rate at the end of the day. In calculating the variation margin of the positions opened before the calculation date, the end-of-day exchange rate of the previous day and the end-of-day exchange rate of the relevant day shall be compared.

(2) The variation margin amount being calculated on the basis of each contract pursuant to the first paragraph shall be netted on a currency 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.

ARTICLE 27- (1) The variation margin generated by the positions opened during the first value date shall be determined by taking account of the difference between the exchange rate/<u>precious metal price</u> at the transaction and the exchange rate at the end of the day. In calculating the variation margin of the positions opened before the calculation date, the end-of-day exchange rate/<u>price</u> of the previous day and the end-of-day exchange rate/<u>price</u> of the relevant day shall be compared.

(2) The variation margin amount being calculated on the basis of each contract pursuant to the first paragraph 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.

Risk Limits

ARTICLE 28 - (1) In the Market to which it provides CCP service, 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 to which CCP service is provided. 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.

(3) Whether or not the member's total required margin resulting from all positions it has taken for itself and its customers in all markets to which CCP service is provided exceeds its risk limit is also checked during the day.

Risk Limits

ARTICLE 28 (1) In the Market to which it provides CCP service, 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 to which CCP service is provided. 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.

(3) Whether or not the member's total required margin resulting from all positions it has taken for itself and its customers in all markets to which CCP service is provided exceeds its risk limit is also checked during the day.





Assets eligible as collateral and guarantee fund contribution ARTICLE 29

(2) 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.

(3) In case of redemption of the fixed income securities accepted as collateral and guarantee fund contribution, the redemption amounts shall be transferred to the relevant cash collateral account.

(4) Out of mortgage-backed securities, mortgage-based securities, asset-backed securities and assetbased 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.

Assets eligible as collateral and guarantee fund contribution ARTICLE 29

- (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.
- (2)(4) Theoretical pricing formulas and methods can be used in the valuation of assets accepted as collateral and guarantee fund contribution by Takasbank shall be published on Takasbank website.
- (3)(5) Fixed-income securities given as collateral shall lose their collateral nature at the end of the previous day of their redemption.





	In case of redemption of the fixed income securities accepted as collateral and guarantee fund contribution, the redemption amounts shall be transferred to the relevant cash collateral account.
	(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.
	(4)(8) Out of mortgage-backed securities, mortgage-based securities, asset-backed securities and assetbased 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.
	(9) 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.
Collateral Composition Limits	Collateral Composition Limits
ARTICLE 32-	ARTICLE 32-
Assets Eligible As Trade Margin	Assets Eligible As Trade Margin
Standard gold traded on the exchanges	Standard gold traded on the exchanges





Group Limit	Group Limit
Max % 25	Max % 2550

Collateral Monitoring and Management

ARTICLE 35- (1) Collateral associated with the positions held in the risk groups are monitored separately in the accounts linked to the member. Any margin surplus in a risk group cannot be used for closing any margin deficit arising from the positions in another risk group nor 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 debt arising from the margin call and 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 receivables, if any, shall not be paid and the default provisions shall be applied to the Member.

Collateral Monitoring and Management

ARTICLE 35- (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. Any margin surplus in a risk group cannot be used for closing any margin deficit arising from the positions in another risk group nor 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 debt arising from the margin call and its clearing and settlement obligations—clearing and settlement obligations until the end of the time periods set forth in the 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.

The member is obliged to close its debt arising from the margin call and 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 receivables, if any, shall not be paid and the default provisions shall be applied to the Member.





Guarantee Fund and its General Principles	Guarantee Fund and its General Principles	
ARTICLE 39-	ARTICLE 39-	
New paragraph	(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.	
Assets Eligible as Contribution to the Guarantee Fund and the Obligation to Restore Contribution Amount	Assets Eligible as Contribution to the Guarantee Fund and the Obligation to Restore Contribution Amount	
ARTICLE 41-	ARTICLE 41-	
Assets Eligible to Guarantee Fund	Assets Eligible to Guarantee Fund	
Standard gold traded on the exchanges	Standard gold traded on the exchanges	
Group Limit	Group Limit	
Max En Fazla % 25	Max. 25 <u>50</u> %	
CHAPTER EIGHT	CHAPTER EIGHT	
Principles Regarding the Default Procedures	Principles Regarding the Default Procedures for CCP	
General principles	Sservice-P-provided Assets	
ARTICLE 43-	General principles	
	ARTICLE 43-	
(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 USD obligations: after 21:00.		





- ç) For variation margin obligations: after 13:00.
- d) For collateral obligations: after 13:00.

bc) For USD obligations: after 21:00.

- ec) For EUR obligations: after 21:00.
- ed) For variation margin obligations: after 13:00.
- de) For collateral obligations: after 13:00.

Settlement and variation margin default

ARTICLE 44- (1) Without prejudice to the limits set forth in article 36 of the Central Counterparty Regulation and the market liquidity constrains, the financial liability of Takasbank for the defaults occurred on the value date of the transaction 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 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) Without prejudice to the limits set forth in article 36 of the Central Counterparty Regulation and the market liquidity constrains, the financial liability of Takasbank for the defaults occurred on the due date of the transaction shall be limited to the payment of debt on the due date; and should

SettlementCash-and variation margin 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-on the value date of the transaction 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. 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.





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 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 shall be used and the relevant amount shall be paid in the next business day.

(3) 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 constrains, the financial liability of Takasbank for the cash defaults 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





- (4) 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.
- (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 amount subject to the transaction and the pre-trade risk premium amount received, if requested, for such transaction.
- (6) If, in the Market, the difference between the theoretical price calculated by Takasbank for the transaction and the exchange rate subject to the transaction on the maturity date is greater than the rate/amount determined by Takasbank on the start date of such swap transaction, Takasbank shall get additional collateral from the relevant party as to be limited to the present value of such difference. The criteria for designating such rate/amount shall be determined by considering the issues such as the historical and/or implied volatility of the relevant currency, in particular, and the market conditions, the nominal/proportional size of the difference and the share of this difference in the margin accounts, etc. In case of any default, the default interest shall be charged pursuant to the provisions of article 45. A mistreatment payment up to ¾ of the collected default interest amount shall

- 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
- (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 Turkish Lira recipient party on the start 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 for such transaction and the guarantee fund of the default member.
- (6) If, in the Market, the difference between the theoretical price calculated by Takasbank for the transaction and the exchange rate subject to the transaction on the maturity date is greater than the rate/amount determined by Takasbank on the start date of such swap transaction, Takasbank shall get additional collateral from the relevant party as to be limited to the present value of such difference. The criteria for designating such rate/amount shall be determined by considering the issues such as the historical and/or implied volatility of the relevant currency, in particular, and the market conditions, the nominal/proportional size of the difference and the share of this difference in the margin accounts, etc. In case of any default, the default interest shall be charged pursuant to the





Clearing House of Turkey	
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.	provisions of article 45. A mistreatment payment up to ¾ of the collected default interest amount 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.
	(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	Precious metal default
ARTICLE 44A-	ARTICLE 44A - (1) Without prejudice to the thresholds set forth
New article	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.





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	Should the precious metal subject to the default be failed to
	raised from the market, its equivalent in TL shall be paid.
	determining its TL equivalent, the Central Bank buying rate
	the business day following the default or the price of the precio
	metal used in the calculation of the end of day variation marg
	shall be used. The relevant amount shall be paid in the ne
	business day.
	(4) In the Market, the liability of Takasbank arising from t
	default against the precious metal recipient party on the start da
	of the transaction shall be limited to the sum of the foreign
	currency obtained through TL/foreign currency amount subject
	the transaction and the pre-trade risk premium amount received for such transaction and the guarantee fund of the default members.
	-
	(5) In case of any default, the default interest shall be charg
	pursuant to the provisions of article 44 and 44A. A compensation payment shall be made, for the portion failed to be delivered,
	the oblige member for the period to be elapsed until its receivable
	is fully credited, up to 3/4 of the collected default interest amount
	(6) If the calculated interest amount remains below the minimu
	default penalty, the payment shall be made over the calculat
	amount.
	(7) The obligor member shall be obliged to pay such debt togeth
	with its default interest to be calculated in accordance with artic
	45.
Default interest	Default interest
ARTICLE 45-	ARTICLE 45-
(3) The defaulting member shall be charged a default interest,	(3) The defaulting member shall be charged a default interest,
a) Up to the amount of TL denominated non-fulfilled obligation amount to	a) Up to the amount of TL and precious metal denominated nor
be calculated based on the below-given haircuts by using the higher of the	fulfilled obligation amount to be calculated based on the below





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

OBLIGATION TYPE	TIME INTERVAL	HAIRCUT
Cash Settlement (TL)	Between 17:16 - 21:00	0,50
	After 21:00 and after the value date	2
Cast Settlement (USD)	After 21:00 and after the value date	2
Cast Settlement (EUR)	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 – 19.00	0,50
	İzleyen günlerde	2

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.

OBLIGATION TYPE	TIME INTERVAL	HAIRCUT
Cash Settlement (TL)	Between 17:16 - 21:00	0,50
	After 21:00 and after the value date	2
Cast Settlement (USD)	After 21:00 and after the value date	2
Cast Settlement (EUR)	After 21:00 and after the value date	2
PRECIOUS METAL	Between 17:01 - <u>21:00</u>	0,50
	After 21:00 and after the value date	<u>2</u>
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 - 19:00	0,50
	In the following days	2

(8) Default interest amount is calculated by using the following





(8) Default interest amount is calculated by using the following formula;

Base * Interest Rate * Days * Haircut / 360

Base;

For TL: Amount closed with delay

For YP: Amount closed with delay * Exchange rate

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

.

formula;

Base * Interest Rate * Days * Haircut / 360

Base;

For TL: Amount closed with delay

For **FXYP**: Amount closed with delay * Exchange rate

<u>Precious metal:</u> 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

Temporary Provision

ARTICLE 58- (1) Piy The application of sub-group limits for eligible collateral in the Market and updating of prices subject to collateral at the intra-day risk calculation times shall commence on 31/12/2019.

(2) Sub-Group Limit, set as 40% for mortgage-backed securities, mortgage-based securities, assetbacked securities and asset-based securities, is to be applied as 100% until 31.12.2019.

Temporary Provision

ARTICLE 58- Removed

