

Reference Translation*: Outline of “Revision of Loss Compensation Framework for Interest Rate Futures Contracts”
(Draft)

June 2021
Tokyo Financial Exchange Inc.

Items	Outline	Remarks
<p>I. Purpose</p>	<ul style="list-style-type: none"> • TFX will revise the current loss compensation framework for Interest Rate Futures contracts (“Contracts”) to deal with losses incurred by TFX, arising from default of a TFX Interest Rate Futures clearing member (“Clearing Member”). Subject to approval of the revision, TFX may be compensated for such above losses (“losses incurred by TFX”) by means of ad-hoc contributions for the Contracts from Clearing Members excluding the defaulting Clearing Member (“Surviving Clearing Members”): a contribution with a cap (c.f. II .3 First Additional Clearing Contribution) and the other contribution capped at the amount equal to Cumulative Variation Margin gains from Surviving Clearing Members (c.f. II .4 Second Additional Clearing Contribution). • In addition, under the revised Framework, TFX will introduce new scheme to liquidate a defaulting Clearing Member’s unsettled positions by means of i) auction (“Default Auction”) and ii) early termination of the unsettled positions (“Partial Tear-up”) if deemed absolutely necessary. 	<ul style="list-style-type: none"> • Under the current Framework, If pre-funded financial resources are exhausted, TFX may make extraordinary cash call from Surviving Clearing Members until TFX is fully compensated for losses ex-post facto. • The revision of the Framework will enhance measurability of ex-post facto contribution requirement for each Surviving Clearing Member.
<p>II. Loss Compensation Financial Resources</p> <p>1. Priority in use of Financial Resources</p>	<ul style="list-style-type: none"> • With respect to losses incurred by TFX, compensation shall be made using financial resources of the following priority: [1st Priority] The Exchange Margin, the market entry deposit, the clearing deposit and other deposit or guarantee, all of which are deposited with TFX by the defaulting Clearing Member. [2nd Priority] The Default Compensation Reserve for Interest Rate Futures set aside by TFX. [3rd Priority] The Interest Rate Futures Clearing Deposits deposited with TFX by Surviving Clearing Members [4th Priority] First Additional Clearing Contribution by Surviving Clearing Members (c.f. II .3.) [5th Priority] Second Additional Clearing Contribution by Surviving Clearing Members having Variation Margin gains (c.f. II .4.) 	<ul style="list-style-type: none"> • The 1st priority financial resources deposit includes deposits with TFX made by a defaulting Clearing Member in the capacity of trading/clearing membership of other TFX Market Derivatives. • If the Default Compensation Reserve (2nd Priority) is consumed during a Cooling-off Period, TFX shall not replenish it during the same period.
<p>2. Loss compensation using clearing deposit</p>		

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(1) Maximum Amount	<ul style="list-style-type: none"> • With respect to losses incurred by TFX during a Cooling-off Period, the maximum amount of loss compensation in the 3rd Priority shall be, for a Surviving Clearing Member, the requirement of clearing deposit as of the day immediately preceding the commencement date of the Cooling-off Period (“Initial Requirement of clearing deposit”). • During a Cooling-off Period, a Surviving Clearing Member shall deposit an amount equal to Initial Requirement of clearing deposit. 	<ul style="list-style-type: none"> • Upon incurring losses, arising from default of a Clearing Member, TFX shall set a Cooling-off Period for disposal of the losses: a period commencing on a day on which there arises obligation of the defaulting Clearing Member with respect to the loss and ending on a day corresponding to the 22nd banking business day (c.f. III.2).
(2) Priority to use Clearing Deposits	<ul style="list-style-type: none"> • When TFX conducts Default Auction, TFX shall determine priority to consume the Interest Rate Futures Clearing Deposits of Surviving Clearing Members depending upon Default Auction results as follows: first, consume clearing deposits of non-bidders, secondly clearing deposits of bidders excluding auction winners and finally the clearing deposits of auction winners. 	<ul style="list-style-type: none"> • For Default Auction with respect to defaulting Clearing Member’s unsettled positions, please refer to III.1. • To establish the practical guideline, TFX will develop further details with respect to incentives for Surviving Clearing Members to win Default Auction (including sequence in favor of auction winner), etc.
(3) Replenishment of clearing deposit	<ul style="list-style-type: none"> • A Surviving Clearing Member shall have replenished the shortfall, if all or part of the deposit is consumed during a Cooling-off Period, to meet the updated requirement of clearing deposit for the member at the end of the period. 	<ul style="list-style-type: none"> • Even if a Surviving Clearing Member’s clearing deposit falls short of Initial Requirement of clearing deposit upon TFX’s use of the deposit (i.e. the 3rd Priority), the member is not obliged to replenish the shortfall during the same period.
3. First Additional Clearing Contribution	<ul style="list-style-type: none"> • If it becomes apparent that financial resources of 1st to 3rd priorities will not be sufficient to cover all the losses incurred by TFX, TFX shall use via cash call ad-hoc clearing contributions for the Contract from Surviving Clearing Members, to compensate for the remaining losses (“First Additional Clearing Contribution”). 	<ul style="list-style-type: none"> • TFX will examine administrative process in detail with respect to First Additional Clearing Contribution, including notification to the Clearing Members of the deposit, deposit from the members, etc.
(1) Allocation to Surviving Clearing Members	<ul style="list-style-type: none"> • The requirement of First Additional Clearing Contribution (4th Priority) for a Surviving Clearing Member shall be obtained by prorating the amount of the above remaining losses based on the amount of its Initial Requirement of clearing deposit for the member. 	
(2) Maximum Amount	<ul style="list-style-type: none"> • The maximum required amount of First Additional clearing contribution for a Surviving Clearing Member with respect to a Cooling-off Period shall be an amount equal to Initial Requirement of clearing deposit for the member during the same period. 	<ul style="list-style-type: none"> • TFX sets such maximum amount (c.f.3(2)) as it deems appropriate in view of; i) Clearing Members’ operational capability to measure and control exposure, and ii)

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<p>4. Second Additional Clearing Contribution</p> <p>(1) Allocation to Surviving Clearing Members</p> <p>(2) Maximum Amount</p>	<p>• If it becomes apparent that financial resources of 1st to 4th priorities will not be sufficient to fully cover the losses incurred by TFX, TFX shall use the other ad-hoc clearing contributions for the Contract from Surviving Clearing Members, to compensate for the remaining losses (“Second Additional Clearing Contribution”) as follows.</p> <p>• The amount of Second Additional Clearing Contribution (5th Priority) with respect to a Surviving Clearing Member shall be obtained by prorating the above remaining losses based on the following value: “Variation Margin gains from the Surviving Clearing Member’s account” / “total Variation Margin gains from all the Surviving Clearing Members accounts” during a period from occurrence of the default event until the settlement of the defaulting Clearing Member’s positions (“Disposal Period”).</p> <p>• Maximum amount of Second Additional Clearing Contribution to be made by a Surviving Clearing Member shall be, with respect to a Disposal Period, equal to cumulative Variation Margin gains from the Surviving Clearing Member’s account during the same period.</p>	<p>mitigation of systemic risk and liquidity crisis risk upon additional contribution.</p> <ul style="list-style-type: none"> • A similar cap will become applicable to FX Clearing contracts: First Additional Clearing Contribution with a cap set at an amount equal to Initial Requirement of clearing deposit. • For options contracts, TFX will determine the amount equivalent to Variation Margin as necessary. • All house and customer accounts of each Clearing Member shall be subject to calculation of the member’s Variation Margin. • TFX will examine administrative process in detail with respect to Second Additional Clearing Contribution, including notification to the Clearing Members of the deposit, deposit from the members, etc.
<p>III. Liquidation Scheme</p> <p>1. Liquidation of the defaulting Clearing Member’s Unsettled Positions</p>	<p>• In general, the unsettled positions of the defaulting Clearing Member are liquidated based on the following priority:</p> <ol style="list-style-type: none"> ① The defaulting Clearing Member executes transactions for resale/repurchase for off-set and to transfer; ② If there exist unsettled positions after ①, a Surviving Clearing Member accepts the unsettled positions for resale/repurchase for off-set, or otherwise liquidate in the manner that TFX deems necessary; 	<ul style="list-style-type: none"> • Under the revised Framework, TFX may conduct Default Auction to liquidate the unsettled positions of the defaulting Clearing Member. • III.1 provides a general example of how the scheme will work. TFX may practically apply adjustment to the procedures and

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<p>2. Cooling-off Period</p> <p>3. Unsuccessful Auction</p>	<p>③ If there exist unsettled positions after ②, TFX starts discussion with other Surviving Clearing Members for liquidation;</p> <p>④ If there exist unsettled positions after ③, TFX conducts Default Auction;</p> <p>⑤ If it becomes apparent that a) Default Auction will fail or b) successful Default Auction will result in loss remainder after compensation by 1st Clearing Contribution, TFX may determine that all or part of Default Auction has failed and proceed with early termination of unsettled positions (“Partial Tear-up”).</p> <p>•If TFX considers necessary, TFX may consult Surviving Clearing Members with respect to procedures to liquidate defaulting Clearing Member’s unsettled positions.</p> <p>•Upon incurring losses arising from default of a Clearing Member, TFX shall set a “Cooling-off Period” commencing on a day on which there arises obligations of the defaulting Clearing Member with regard to the loss (“Loss-incurred Date”) ending on a day corresponding to the 22nd banking business day, and notify Surviving Clearing Members of the period.</p> <p>•Upon incurring additional losses arising from defaulting of another Clearing Member during a Cooling-off Period, TFX shall extend the original end of the Cooling-off Period to the 22nd banking business day from the day the further losses incurred.</p> <p>•If it becomes apparent that Default Auction will fail or successful auction may cause loss remainder after appropriating compensation by First Additional Clearing Contribution, TFX may determine that all or part of Default Auction has failed and proceed with Partial Tear-up.</p> <p>•Current market price shall be applied for the purpose of Partial Tear-up.</p>	<p>tools, etc. based on the default size and market conditions.</p> <p>•TFX may conduct Partial Tear-up only in the least likely event; as requirement of clearing deposit ,etc. is calculated to cover the largest aggregate credit exposure under extremely stressed market conditions incurred by TFX (“Probable Maximum Loss”).</p> <p>•TFX will consult with Surviving Clearing Members for Liquidation of the unsettled positions in order to avoid Partial Tear-up.</p> <p>•TFX will establish practical guideline for Default Auction, taking into account the development of global discussions.</p> <p>•Procedures to liquidate defaulting Clearing Member’s unsettled positions shall be, in principle, within 24 hours.</p> <p>•Under Loss Compensation Framework for FX Clearing contracts, “Cooling-off Period from Initial Loss-incurred Date to the 22nd banking business day” will also become applicable.</p> <p>•TFX will further examine such details as applicability of current market price to the Allocated Position for Partial Tear-up (including applicability of daily settlement price of the day, etc.).</p>

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<p>4. Partial Tear-up</p>	<p>•Prior to early termination of the defaulting Clearing Member’s unsettled positions subject to Partial Tear-up (“Positions to Partial Tear-up”), TFX shall have allocated positions in accordance with ①-③ (“Allocated Position for Partial Tear-up”) to Surviving Clearing Members having net open positions against Positions to Partial Tear-up. Positions to Partial Tear-up and Allocated Position for Partial Tear-up shall be simultaneously terminated.</p> <p>① Firstly, only with respect to contract month in which there exists Positions to Partial Tear-up, TFX shall a) calculate Surviving Clearing Member’s net positions for each house/customer account, b) identify accounts in which there exists net positions of the side against Positions to Partial Tear-up, and c) extract the net position volume of such identified account (“Net Positions for Each Account in the Month”)</p> <p>② Secondly, TFX shall obtain Allocated Position for Partial Tear-up to a Surviving Clearing Member by prorating Positions to Partial Tear-up based on the Clearing Member’s total sum of Net Positions for Each Account in the Month (i.e. all house/customer accounts).</p> <p>③ Eventually, TFX shall obtain Allocated Position for Partial Tear-up for each house/customer account of the Clearing Member; by prorating Positions to Partial Tear-up to the Surviving Clearing Member【c.f. ②】 based on Net Positions for Each Account in the Month 【c.f. ①】 for each house/customer account.</p>	<p>•In case of effecting Partial Tear-up, TFX shall use financial resources to compensate for Variation Margin losses arising from the defaulting Clearing Member’s unsettled positions, incurred until then.</p> <p>•Both house and customer accounts shall be subject to calculation of Allocated Position for Partial Tear-up; TFX may effect early termination of positions for customer accounts as well as house accounts.</p> <p>•For example, if Positions to Partial Tear-up is “long”, TFX shall identify accounts in which there exists net “short” positions; Net Positions for Each Account in the Month means the net position volume in such accounts.</p> <p>• In III.4.①, if no accounts (in which there exists net positions of the side against Positions to Partial Tear-up) are identified, Positions for Each Account in the Months shall be deemed as “0”.</p> <p>•TFX will further examine administrative process of Partial Tear-up, including calculation and notification of Allocated Position for Partial Tear-up.</p>
<p>IV. Deposit of Special Purpose Collateral during Cooling-off Period</p> <p>1. Deposit of Special Purpose Collateral obligated for Surviving Clearing members</p>	<p>•During Cooling-off Period, a Surviving Clearing Member shall deposit, as Special Purpose Collateral, total sum of the following in Japanese Yen:</p> <p>a) Variation Equivalent; the calculated amount based on the daily changes in the requirement of a clearing deposit for the member, and</p>	<p>•IV. is designed similar to FX Clearing contracts.</p> <p>•Special Purpose Collateral shall be “a Clearing Deposit” defined in article 156.11 of the Act.</p>

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<p>2. Calculation method for Requirement of Special Purpose Collateral</p> <p>(1) Variation Equivalent</p>	<p>b) Additional Clearing Contributions Equivalent (the amount may be used in the event of loss sharing among Surviving Clearing Members); calculated requirement for the member with respect to First and Second Additional Clearing Contribution (“Additional Clearing Contributions”) .</p> <ul style="list-style-type: none"> •When the amount of losses incurred by TFX during a Cooling-off Period exceeds the sum of financial resources of 1st, 2nd, and 3rd priorities, and such excess causes TFX to proceed with cash call for Additional Clearing Contributions (i.e. 4th or 4th and 5th priorities), TFX shall appropriate Special Purpose Collateral deposited by each Surviving Clearing Member; by which the member shall perform its obligations for its Additional Clearing Contributions. •The requirement of Special Purpose Collateral for a Surviving Clearing Member shall be the following sum; the Variation Equivalent and Additional Clearing Contributions Equivalent, with each equivalent amount calculated respectively on every business day during a Cooling-off Period. •To obtain Variation Equivalent for a Surviving Clearing Member, firstly, TFX shall calculate an amount equivalent to the requirement of clearing deposit (“Requirement Amount Equivalent”) for each business day as base calculation date during a Cooling-off Period. •Secondly, TFX shall determine an amount to base calculation of Variation Equivalent (“Base Amount”) for each business day in accordance with the category of base calculation date in ① and ② as below. <ul style="list-style-type: none"> <Base Amount> <ul style="list-style-type: none"> ① Base calculation date : the first day of a Cooling-off Period <p>If the Requirement Amount Equivalent of the first day in a Cooling-off Period exceeds the Initial Requirement of clearing deposit, the amount of Requirement Amount Equivalent shall be used as the Base Amount. If not, the amount of Initial Requirement of clearing deposit shall be used as the Base Amount.</p> ② Base calculation date : days other than ① <p>If the Requirement Amount Equivalent of the business day exceeds the Base Amount of the preceding business day, the amount of Requirement Amount Equivalent shall be used as the Base Amount of the day. If not, the preceding business day’s Base Amount shall be used as the Base Amount of the day.</p> 	<ul style="list-style-type: none"> •The requirement of Variation Equivalent shall be set as zero at the end of the Cooling-off Period.

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<p>(2) Additional Clearing Contributions Equivalent</p> <p>3. Deposit of Special Purpose Collateral</p> <p>V. Deregistration of Clearing Membership</p> <p>1. Deregistration date in normal times</p>	<ul style="list-style-type: none"> • Finally, TFX shall derive the Variation Equivalent by deducting Initial Requirement of clearing deposit from the Base Amount for every business day during the Period. • The sum of the following ① and ② shall make Additional Clearing Contributions Equivalent for a Surviving Clearing Member as of a business day: <ul style="list-style-type: none"> ① First Additional Clearing Contribution equivalent: If the losses incurred by TFX during a Cooling-off Period, exceeds the financial resources of 1st and 2nd priorities, such loss amount shall be shared and borne among Surviving Clearing Members. The share amount for a Surviving Clearing Member shall be obtained by prorating the excess based on its Initial Requirement of clearing deposit, subject to cap at the amount of the member's Initial Requirement of clearing deposit. ② Second Additional Clearing Contribution equivalent: If the losses incurred by TFX during a Cooling-off Period, exceeds the financial resources of 1st, 2nd, 3rd, and 4th priority, such loss amount shall be shared and borne among Surviving Clearing Members having cumulative Variation Margin gains ("Surviving Clearing Members making Second Additional Clearing Contribution"). The share amount for a Surviving Clearing Member making Second Additional Clearing Contribution shall be obtained by prorating the Variation Margin losses arising from the defaulting Clearing Member based on the member's Variation Margin gains. • For each business day during Cooling-off Period, TFX shall calculate and notify to each Surviving Clearing Member the required amount of Special Purpose Collateral to be deposited by the member. • If an applicant for Clearing Membership deregistration and TFX agrees on a deregistration date, the deregistration of a clearing membership shall come into effect on such agreed date or in the absence of such agreement, either ① or ② whichever comes later in timing shall make the effective deregistration date: <ul style="list-style-type: none"> ① On the 12th bank business day from the following day on which TFX receives the deregistration application from the applicant. 	<ul style="list-style-type: none"> • The calculated requirement of Additional Clearing Contributions Equivalent shall be zero as of either date whichever comes later in timing: ① on a day when a Cooling-off Period ends or ② on a day when TFX is fully compensated for the loss arising from the defaulting Clearing Member. • TFX will further examine such details as notification on the required amount of Special Purpose Collateral and its deposit dead line, etc. • Under current Framework, TFX approves each of the deregistration application by designating deregistration time and date. • Upon revision of the Framework, TFX will allow deregistration of Clearing Membership without approval by TFX.

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<p>2. Deregistration date that falls on Cooling-off Period</p> <p>3. Obligation of Deregistration Applicant to compensate losses</p> <p>VI. Implementation Timing</p>	<p>② On the 8th bank business day from the following day on which all the unsettled positions are liquidated via resale/repurchase transactions or transfer, with all obligations to TFX performed.</p> <p>·If an applicant for Clearing Membership deregistration and TFX agrees on a deregistration date, the deregistration of a clearing membership shall come into effect on such agreed date, or in the absence of such agreement, either ①, ② or ③ whichever comes later in timing shall make the effective deregistration date.</p> <p>① On the 12th bank business day from the following day on which TFX receives the deregistration application from the applicant.</p> <p>② On the 8th bank business day from the following day on which all the unsettled positions are liquidated via resale/repurchase transactions or transfer, with all obligation to TFX resolved.</p> <p>③ On the final day of the Cooling-off Period.</p> <p>·An applicant for deregistration of Clearing Membership shall remain liable for losses incurred by TFX prior to deregistration; the applicant shall perform obligations as Surviving Clearing member by making clearing deposits, First Additional Clearing Contribution and Second Additional Clearing Contribution.</p> <p>·If an applicant for deregistration of Clearing Membership has rights and obligations caused prior to deregistration, Rules and Regulations of TFX shall remain applicable to them.</p> <p>·The proposed revision will be implemented in the first half of the fiscal year of 2021.</p>	<p>·The obligation to TFX referred in ② does not include costs related to disqualification and unbilled costs and expenses related to transactions, which the applicant has to bear separately.</p>

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