

## Outlines related to Revision of Loss Compensation Framework and Risk Management Framework for Listed Derivatives Clearing Services

January 30th, 2020

Japan Securities Clearing Corporation

### I. Purpose

Under current JSCC loss compensation framework for JGB Futures Clearing Service and Index Futures Clearing Service (hereinafter collectively referred to as the “Securities Related Derivatives Clearing Services”), when a loss arises in association with a default of a Clearing Participant, such loss shall basically be covered in the order of (1) the Margin and Clearing Fund deposited by the defaulted Clearing Participant (hereinafter referred to as “Defaulter”), (2) the market operators’ contribution, (3) JSCC’s contribution and (4) the Clearing Fund contribution from Clearing Participants other than the defaulted Clearing Participant (hereinafter referred to as the “Survivors”), and if these loss compensation financial resources are insufficient to cover the loss, the ex-post facto Special Clearing Charge contribution from the Survivors shall be called until the entire loss is covered.

Under current JCCH loss compensation framework for Commodity Market Clearing Services (Scheduled to launch clearing service at JSCC in July 2020), if loss compensation financial resources are insufficient to cover the loss in association with a default of a Clearing Participant, the ex-post facto Special Clearing Charge contribution from the Survivors shall be called until the entire loss is covered.

Regarding loss compensation framework for Securities Related Derivatives Clearing Services and Commodity Market Clearing Services (hereinafter collectively referred to as the “Listed Derivatives Clearing Services”), in the recent global regulatory trend and discussions related to recovery and resolution, a predictability of the amount of funds a Clearing Participant may be required to contribute ex-post facto upon default of another Clearing Participant is considered important for Listed Derivatives trading whose exposure level is relatively high. In light of this, JSCC will adopt a special clearing charge with a cap (First Clearing Charge) and a special clearing charge capped at accumulated VM-OP Premium gain equivalent of the Survivors (Second Special Clearing Charge), and establish the resolution scheme that allows an early termination of the issues/quantity of position that are necessary (Partial Tear-up) when the loss compensation financial resources are afraid to be insufficient to cover loss of the Defaulter upon settlement default.

To minimize an impact of a Clearing Participant default on Clients, etc. as much as possible, JSCC will set the level of the First Clearing Charge at such level that could avoid Partial Tear-up as much as possible and reinforce the pre-funded financial resources. Moreover, from viewpoint of limiting burden on Survivors upon Clearing Participant default, JSCC will adopt the practices broadly adopted at foreign major CCPs, that include an adoption of a default assumption of two firms with the largest loss in the calculation of the Clearing Fund requirement related to Listed Derivatives-related Clearing Qualifications and setting expected holding period of 2 days in SPAN margin calculation. By these revisions, JSCC intends to strengthen, comprehensively, its loss compensation framework and risk management framework under the Listed Derivatives Clearing Services.

## II. Outlines

Item	Outline	Remarks
<p>1. Revision of Loss Compensation Framework under Listed Derivatives Clearing Services</p> <p>(1) Revision of Loss Compensation Financial Resources</p>	<ul style="list-style-type: none"> <li>▪ To make the financial resources that Clearing Participants are required to contribute ex-post facto more predictable, losses JSCC incurs as a result of a Clearing Participant default in the Listed Derivatives Clearing Services shall be covered in the order described below respectively for each Clearing Qualification related to the Listed Derivatives:</li> </ul> <p>Recovery by Pre-funded Loss Compensation Financial Resources</p> <p>(1st) Margin/Clearing Fund of Defaulter</p> <p>(2nd) Market Operator's Contribution</p> <p>(3rd) Contribution from JSCC's Settlement Guarantee Reserve</p> <p>(4th) Survivors' Clearing Fund Contribution</p> <p>Recovery by Ex-post Facto Contribution of Loss Compensation Financial Resources</p> <p>(5th) First Special Clearing Charge (Special Clearing Charge with Cap)</p> <p>(6th) Second Special Clearing Charge (Special Clearing Charge capped at accumulated VM-OP Premium gains of Survivors during the liquidation period)</p>	<ul style="list-style-type: none"> <li>▪ See Annex 1 for the whole picture of the revision of the Loss Compensation Framework and default settlement scheme upon settlement default.</li> <li>▪ The market operator's contribution and the settlement guarantee reserve related to the Commodity Market Clearing Service shall be distinguished from the market operator's contribution and the settlement guarantee reserve related to other Clearing Services.</li> <li>▪ Even if a part of the settlement guarantee reserve is consumed during the Default Settlement Period, no replenishment of JSCC's settlement guarantee reserve (3rd Priority</li> </ul>

Item	Outline	Remarks
(2) Handling of Survivors' Clearing Fund Contribution (4th Priority Resource)	<ul style="list-style-type: none"> <li>• The Survivors' Clearing Fund contribution in respect of a default occurred during a Default Settlement Period shall be capped at the Survivors' Clearing Fund requirement related to the relevant Clearing Qualification applied on the previous day of the relevant Default Settlement Period (hereinafter referred to as the "Clearing Fund Requirement for Default Settlement Period").</li> <li>• When the Survivors' Clearing Fund contribution is consumed, the Clearing Participants shall replenish their Clearing Fund contribution to the amount of the Clearing Fund requirement calculated on the last day of the Default Settlement Period by 2:00 p.m. on the next day.</li> </ul>	<p>Resource) will occur during the Default Settlement Period.</p> <ul style="list-style-type: none"> <li>• See 2. (1) for the Default Settlement Period.</li> </ul>
(3) Handling of First Special Clearing Charge (5th Priority Resource)	<ul style="list-style-type: none"> <li>• When the amount of loss JSCC incurs as a result of a Clearing Participant default exceeds the amount of the loss compensation financial resources up to 4th Priority Resource, such excess loss shall be covered by Survivors' First Special Clearing Charge contribution.</li> <li>• The amount of the First Special Clearing Charge shall be decided by prorating the amount of the excess loss for the Clearing Qualification with respect to which the loss cannot be covered by the loss compensation financial resources up to the 4th Priority Resource according to the Clearing Fund Requirement for Default Settlement Period for each Survivor for the relevant Clearing Qualification.</li> <li>• In respect of defaults occurred during a Default Settlement Period, the amount of the First</li> </ul>	<ul style="list-style-type: none"> <li>• From viewpoint of minimizing an</li> </ul>

Item	Outline	Remarks
<p>(4) Handling of Second Special Clearing Charge (6th Priority Resource)</p>	<p>Special Clearing Charge contribution shall be capped at 3 times the Clearing Fund Requirement for Default Settlement Period for the relevant Survivor.</p> <ul style="list-style-type: none"> <li>• When the amount of loss JSCC incurs as a result of a Clearing Participant default exceeds the amount of the loss compensation financial resources up to 5th Priority Resource, such excess loss shall be covered by Survivors' Second Special Clearing Charge contribution.</li> <li>• The Survivors subject to the Second Special Clearing Charge contribution shall be those gaining in the amount JSCC calculates as the amount equivalent to the VM-OP Premium (hereinafter referred to as "VM-OP Premium Equivalent") to be settled in respect of all accounts of the Clearing Participant for each type of Clearing Qualification related to the Listed Derivatives for the period from the date of occurrence of a Clearing Participant default in respect of a Clearing Qualification (or, when the Defaulter completed its settlement on such date, next business day) to the date on which liquidation of all defaulted contracts of the Defaulter is completed (hereinafter referred to as the "Liquidation Period"). The amount of such contribution shall be decided by prorating the excess loss for the relevant Clearing Qualification, which cannot be covered by the loss compensation financial resources up to the 5th Priority Resource, according to the gaining amount of the relevant Survivor. In this case, the amount of contribution from the Clearing Participant who is gaining in respect of the VM-OP Premium Equivalent shall be capped at the accumulated</li> </ul>	<p>impact on Clients, etc., the level of 3 times is set as the level that could avoid Partial Tear-up as much as possible.</p> <ul style="list-style-type: none"> <li>• The amount of the VM-OP Premium Equivalent shall be determined by JSCC at each occasion taking into account VM arising in association with the trades and settlements during the Liquidation Period for Futures, and the net option value during the Liquidation Period for Option Contracts. (See Annex 2 for summary of calculation overview).</li> </ul>

Item	Outline	Remarks
(5) Collateral Posting during Default Settlement Period	<p>VM-OP Premium Equivalent for the relevant Survivor during the Liquidation Period.</p> <ul style="list-style-type: none"> <li>▪ During the Default Settlement Period, the Clearing Fund Requirement for Default Settlement Period shall apply as the Clearing Fund requirement for the relevant Default Settlement Period; provided that, if any portion of the Clearing Fund Requirement for Default Settlement Period is consumed as loss compensation financial resources during the relevant Default Settlement Period, such amount shall be deducted from the requirement.</li> <li>▪ During the Default Settlement Period, JSCC may call for deposit of the amount calculated based on the fluctuation in the amount of the Clearing Fund as Default Contingent Margin separately from the Clearing Fund from Survivors. Procedures for Default Contingent Margin, such as calculation method, are outlined in ① and ② below.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Default Contingent Margin is deposited to secure obligations owed by Survivors to JSCC in respect of the Clearing Contracts.</li> </ul>
① Default Contingent Margin Calculation Method	<ul style="list-style-type: none"> <li>▪ The Clearing Fund requirement which should have been calculated/applied in the ordinary method had the Default Settlement Period not been set shall be referred to as the “Calculatory Requirement” and the Clearing Fund Requirement for Default Settlement Period shall be referred to as the “Requirement Applied.”</li> <li>▪ When the Calculatory Requirement calculated daily during the Default Settlement Period exceeds the Requirement Applied, such excess shall be the Default Contingent Margin requirement; provided that, when the Default Contingent Margin requirement for a calculation date decreases from the Default Contingent Margin requirement for the previous</li> </ul>	<ul style="list-style-type: none"> <li>▪ As the Default Contingent Margin, the maximum amount of increase during the Default Settlement Period up to the most recent calculation shall apply.</li> </ul>

Item	Outline	Remarks
② Deposit of Default Contingent Margin	<p>business day, the Default Contingent Margin requirement for the previous business day shall apply as the Default Contingent Margin for such calculation date.</p> <ul style="list-style-type: none"> <li>▪ The Default Contingent Margin shall be zero when the Default Settlement Period ends.</li> <li>▪ The Default Contingent Margin requirement shall be added to the Margin requirement for the Clearing Participant's house account on a daily basis.</li> <li>▪ When the Default Contingent Margin needs to be deposited, JSCC will notify such effect and the required amount to the Clearing Participant, who shall deposit its House Margin in the amount at least equal to the shortfall by 2:00 p.m. on the next business day following the date on which the Default Contingent Margin requirement applied.</li> <li>▪ Procedures related to the Default Contingent Margin, such as deposit method, shall be the same as House Margin.</li> </ul>	
(6) Treatment of Party Requested Renunciation of Clearing Qualification	<ul style="list-style-type: none"> <li>▪ The Clearing Participant requested renunciation of its Clearing Qualification shall renounce its Clearing Qualification on the later of (i) the 30<sup>th</sup> day from the next day following the date of request and (ii) the day on which all outstanding contracts to which it is a party have been canceled.</li> <li>▪ However, the Clearing Participant requested renunciation of its Clearing Qualification during a Default Settlement Period shall renounce its Clearing Qualification on the later of (i) the date on which the relevant Default Settlement Period ends and (ii) the day on which all outstanding contracts to which it is a party have been canceled.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Under current procedures, to request renunciation of a Clearing Qualification, the Clearing Participant is required to cancel all outstanding contracts in advance, and is required to obtain JSCC's approval for renunciation.</li> <li>▪ JSCC will suspend all clearings to</li> </ul>

Item	Outline	Remarks
<p>2. Revision of Liquidation Scheme upon Settlement Failure in Listed Derivatives Clearing Services</p> <p>(1) Liquidation of Defaulted Contracts (Position) of Defaulter</p>	<ul style="list-style-type: none"> <li>▪ The Clearing Participant requested renunciation of its Clearing Qualification shall be requested contribution of Survivors' Clearing Fund (4th Priority Resource), First Special Clearing Charge (5th Priority Resource) and Second Special Clearing Charge (6th Priority Resource) in respect of the loss related to Clearing Participant defaults occurred by the date of its renunciation of the Clearing Qualification.</li>   <li>▪ Upon default of a Clearing Participant holding a Clearing Qualification related to Listed Derivatives, JSCC shall set the period up to the 30<sup>th</sup> day following the first default as Default Settlement Period (in case of occurrence of a further default of another Participant during the</li> </ul>	<p>which the relevant Clearing Participant is a party from the next day following the acceptance of the request for renunciation of the Clearing Qualification (other than trades required to cancel outstanding contracts).</p> <ul style="list-style-type: none"> <li>▪ When a Default Settlement Period is set during the period from submission of a request for renunciation of a Clearing Qualification to the date of renunciation, such request shall be treated in the same manner as the request submitted during the Default Settlement Period.</li>   <li>▪ See Annex 3 for an example of standard default settlement timeline.</li> <li>▪ ① and ② remain unchanged.</li> </ul>



Item	Outline	Remarks
	<p>period, the Default Settlement Period shall be the period from the determination of the first default to the date on which JSCC acknowledges the completion of the default settlement of such other Participant), and liquidate the defaulted contracts of the Defaulter according to the procedures outlined in ① through ④ below:</p> <p>① Cause the Defaulter to transfer the Defaulter's defaulted contracts to Survivors, perform offsetting sale or purchase, exercise option, execute hedge transaction on the account of the Defaulter and perform other arrangement JSCC considers necessary;</p> <p>② Hold default auction;</p> <p>③ Hold consultation;</p> <p>④ (When agreement cannot be reached through consultation), implement early termination of Defaulter's defaulted contracts (quantity remain un-liquidated) (Partial Tear-up).</p>	<ul style="list-style-type: none"> <li>For Defaulter's position related to Commodity market, ② default auction related to the position for which settlement by delivery is decided (Defaulting Delivery Positions) shall be conducted by setting price range of 10% plus/minus base price determined based on the latest Settlement Price, and when the default auction is successful, the settlement by delivery shall be performed between the bid winner and the non-defaulter (determined in a manner prescribed by JSCC) at the delivery price. Moreover, when the default auction is unsuccessful, the Clearing Contracts shall be settled by deeming that offsetting sale or purchase of the Defaulting Delivery Position and the non-defaulter position at the delivery price has been</li> </ul>

Item	Outline	Remarks
(2) When Auction is Unsuccessful	<ul style="list-style-type: none"> <li>▪ As a result of a default auction for liquidation of the Defaulter’s defaulted contracts (including outstanding contracts related to hedge transactions on the account of the relevant Defaulter; the same applies hereinafter), when it is found out that the Defaulter’s expected loss that would arise had the default auction been successfully concluded at such price (including the loss equivalent outside of the default auction for position liquidation) is likely to exceed the loss compensation financial resources up to the Second Special Clearing Charge (6th Priority Resource) under the loss compensation framework, Clearing Participants, JSCC and the market operators (only those operating the designated markets that trade the Subject Transactions for Clearing related to the relevant Clearing Qualification; the same applies hereinafter) shall promptly have a consultation on the countermeasures for the settlement of loss (hereinafter referred to as the “Countermeasures”).</li> <li>▪ The Countermeasures subject to the consultation must achieve coverage of the entire amount of JSCC’s loss and continuation of JSCC’s Clearing Services, and below ① and ② are</li> </ul>	<p>executed without going onto processes ③ and ④ in principle (in this case, the non-defaulter may charge position re-establishment cost up to 10% of the delivery price to JSCC (submission of evidential document is required)).</p> <ul style="list-style-type: none"> <li>▪ In the same manner as current procedures, the order of consumption of the Survivors’ Clearing Fund contribution (4th Priority Resource) under the loss compensation waterfall shall be, firstly, the Clearing Fund deposited with JSCC by the Clearing Participants as of the first day of the Default Settlement Period other than the bid winner in the default auction and, secondly, the Clearing Fund deposited with JSCC by the Clearing Participant who is the bid winner.</li> </ul>

Item	Outline	Remarks
(3) Partial Tear-up	<p>required for an agreement at the consultation:</p> <ul style="list-style-type: none"> <li>① The total Clearing Fund Requirements for Default Settlement Period of the Survivors who agree with the Countermeasures submitted for consultation is more than two-thirds of the total Clearing Fund Requirement for Default Settlement Period of all Survivors; and</li> <li>② The consent of Clearing Participants that would bear any additional burden in association with the Countermeasures submitted for consultation, as well as JSCC and the Market Operators is obtained</li> </ul> <ul style="list-style-type: none"> <li>▪ When an agreement on the Countermeasures is reached at the consultation, JSCC will process required liquidation according to the Countermeasures.</li> <li>▪ When an agreement cannot be reached through consultation, JSCC shall decide that necessary portion of the default auction was unsuccessful, and effect early termination (Partial Tear-up) of the defaulted contracts remain un-liquidated as per Section (3) below.</li> <li>▪ Under the Partial Tear-up, the early termination of the position related to the Defaulter's defaulted contracts subject to the Partial Tear-up (hereinafter referred to as the "Partial Tear-up Covered Position"), as well as the early termination of the position of Survivors holding offsetting position against the Partial Tear-up Covered Position determined through allocation in a manner outlined in ① to ③ below (hereinafter referred to as the "Partial</li> </ul>	<ul style="list-style-type: none"> <li>▪ Consultation period shall be, in principle, within 24 hours after the bid result of the default auction is known.</li> <li>▪ Partial Tear-up shall be performed as of the timing designated by JSCC on the date designated by JSCC as the Partial Tear-up implementation date using the Settlement Price on that day.</li> <li>▪ When implementing the Partial Tear-up, loss arising from the out-of-the-money amount in the VM-OP Premium related to the Defaulter's position up to the Partial</li> </ul>

Item	Outline	Remarks
<p>3. Revision of Clearing Fund Framework related to Listed Derivatives Clearing Services</p> <p>(1) Clearing Fund Requirement</p>	<p>Tear-up Allocated Position”) are effected on the Partial Tear-up implementation date:</p> <p>① As to the issues for which Partial Tear-up Covered Position exists, for each account held by each Survivor, obtain the quantity of the relevant Survivor’s net position that comprises an offsetting position against Partial Tear-up Covered Position (when the Partial Tear-up Covered Position is long position, the quantity of the Survivor’s net short position, and when the Partial Tear-up Covered Position is short position, the quantity of the Survivor’s net long position, hereinafter referred to as the “Net Quantity by Issue”).</p> <p>② Obtain the Survivor’s Partial Tear-up allocation quantity by prorating the quantity of the Partial Tear-up Covered position according to the sum of the Net Quantity by Issue for all accounts held by the relevant Survivor.</p> <p>③ Decide Partial Tear-up Allocated Position by allocating the Survivor’s Partial Tear-up allocation quantity obtained as per ② above to each account by prorating it according to the Net Quantity by Issue for each account.</p> <p>• The Clearing Fund requirement for Clearing Qualifications related to Listed Derivatives shall be the amount sufficient to cover loss amount of top 2 firms expected upon default of a Clearing Participant under extreme but plausible market conditions (under stress) (Base PML (Probable Maximum Loss) Amount).</p>	<p>Tear-up shall be covered by the loss compensation financial resources.</p> <ul style="list-style-type: none"> <li>• See Annex 4 for the outline of Partial Tear-up process.</li> <li>• When, in the Net Quantity by Issue, there is no offsetting position against Defaulter’s position subject to Partial Tear-up, the Net Quantity by Issue shall be zero.</li> </ul> <p>• Current default assumption is a default of the Clearing Participant with the largest loss and 5 Clearing Participants with the lowest amount of</p>

Item	Outline	Remarks
	<ul style="list-style-type: none"> <li>▪ Specifically, the Clearing Fund requirement calculation method for Clearing Qualifications related to Listed Derivatives shall be revised as follows:               <ul style="list-style-type: none"> <li>① Clearing Fund Requirement Calculation Formula</li> </ul> <p>The Clearing Fund requirement shall be obtained through below formula:</p> <p>Clearing Fund Requirement =</p> <p>(Greater of Period Average Base PML Amount(*) and Daily Largest Base PML Amount for the Calculation Based Date) × Individual Company Prorated Base IM Amount / Total Prorated Base IM Amounts</p> <p>(*) Period Average Base PML Amount means the average amount during the calculation period of Daily Largest Base PML Amount (6 months period preceding the base date for calculation of required amount of Clearing Fund for futures and option).</p> <li>② Daily Largest Base PML Amount (the largest value of the Largest Base PML Amount per Stress Scenario on each day) Calculation Method</li> </li></ul> <p>Daily Largest Base PML Amount refers to the largest of the Largest Base PML</p>	<p>net worth.</p> <ul style="list-style-type: none"> <li>▪ For Commodity market, default assumption shall be a default of the Clearing Participant with the largest loss and 5 Clearing Participants with the lowest amount of net worth for the time being.</li> <li>▪ Under current procedures, it is the amount obtained through below formula:               <p>Clearing Fund Requirement =</p> <p>(Period Average Base PML Amount) × Individual Company Prorated Base IM Amount / Total Prorated Base IM Amounts</p> </li> <li>▪ Handling of the Individual Company Prorated Base IM Amount and Total Prorated Base IM Amounts remains unchanged.</li> <li>▪ We will also make necessary revisions to the stress scenarios to cover</li> </ul>

Item	Outline	Remarks
	<p>Amounts per Stress Scenario on each day, and the Largest Base PML Amounts per Stress Scenario refers to the total sum of Base PML Amounts of the Clearing Participants whose Base PML Amount becomes the largest and the second largest in each stress scenario (a combination of price fluctuations designated by JSCC as extreme but plausible market conditions).</p>	<p>historical events more closely and exhaustively. However, as to stress scenarios for Commodity market, the method currently applied to the existing securities clearing derivatives products shall apply for the time being.</p> <ul style="list-style-type: none"> <li>▪ At the same timing, we will set expected holding period for SPAN Margin calculation at 2 days and also make necessary revisions, such as Price Scan Range setting method. However, for Commodity market, method applicable to the existing securities derivatives products shall continue to apply for the time being.</li> <li>▪ For the Clearing Fund requirement for the Clearing Qualifications related to the Commodity market, Largest Base PML Amount per Stress Scenario refers to the total sum of</li> </ul>

Item	Outline	Remarks
(2) Deposit of Clearing Fund	<ul style="list-style-type: none"> <li>▪ The Clearing Fund requirement shall be calculated and applied on every business day.</li> <li>▪ When the amount of the deposited Clearing Fund falls short of the requirement, the Clearing Participant shall deposit the Clearing Fund by 2:00 p.m. on the next business day following the date of occurrence of such shortfall (application date).</li> </ul>	<p>Base PML Amount of the Clearing Participant whose Base PML Amount becomes the largest in each stress scenario and Base PML Amounts in such stress scenario of 5 Clearing Participants with the lowest amounts of net worth, for the time being.</p> <ul style="list-style-type: none"> <li>▪ Currently, calculated and applied on a weekly basis.</li> <li>▪ The Clearing Fund requirement will be notified through the collateral management system, which is the same as those currently used, by 7:30 p.m. on every business day.</li> <li>▪ In association with the revision of the Clearing Fund requirement calculation method, the framework of allowing Margin requirement increase according to the risk equivalent exceeding collateral shall be</li> </ul>

Item	Outline	Remarks
		abolished.

### III. Implementation Timing (Plan)

To be implemented at the same timing as the transfer of Commodity Derivatives from the Tokyo Commodity Exchange to the Osaka Exchange and the clearing function integration (aimed at July 2020).

End of Document



# Annex 1. Whole Picture of Loss Compensation Framework & Resolution Scheme Revision

## 【Basic Concept】

- Re-define current **Special Clearing Charge** as “**First Special Clearing Charge**” and set a cap on it, and introduce **framework of Second Special Clearing Charge** assuming the case where resources up to First Special Clearing Charge are insufficient to cover losses arising from a Participant default and **Partial Tear-up (early termination of offsetting positions in the same quantity as unliquidated positions)** assuming these resources are insufficient to liquidate the entire position of the defaulter.
- From viewpoint of comprehensiveness of financial resources and sound position liquidation, framework of Second Special Clearing Charge and Partial Tear-up will be established. However, taking into consideration the significant impact of tear-up on the market, various measures, such as conservatively setting the level of First Special Clearing Charge and making necessary revisions to Margin / Clearing Funds (CF), will be taken to avoid Partial Tear-up as much as possible.

## Listed Derivatives Products

Current	JSCC Framework (Securities-related Listed Derivatives)	JCCH Framework (Commodity Derivatives)	JSCC Framework after Revision (New Framework)	
1st	Defaulter's Collateral	Defaulter's Collateral	1st	Defaulter's Collateral
2nd	Exchange's Contribution	JCCH's Contribution	2nd	Market Operator's Contribution
3rd	JSCC's Contribution	Exchange's Contribution	3rd	<b>Revised Points</b> JSCC's Contribution
4th	Survivors' Clearing Fund	Survivors' Ordinary Clearing Funds	4th	Survivors' Clearing Fund
5th	Special Clearing Charge	Survivors' Ex-post Facto Contribution	5th	<b>First Special Clearing Charge (Capped at x3 of CF)</b>
			6th	<b>Second Special Clearing Charge (In-the-Money Participant to contribute according to its in-the-money amount)</b>
				<b>Consultation</b>
				<b>Partial Tear-up (Early Termination of Positions)</b>



If above resources are still insufficient to cover loss

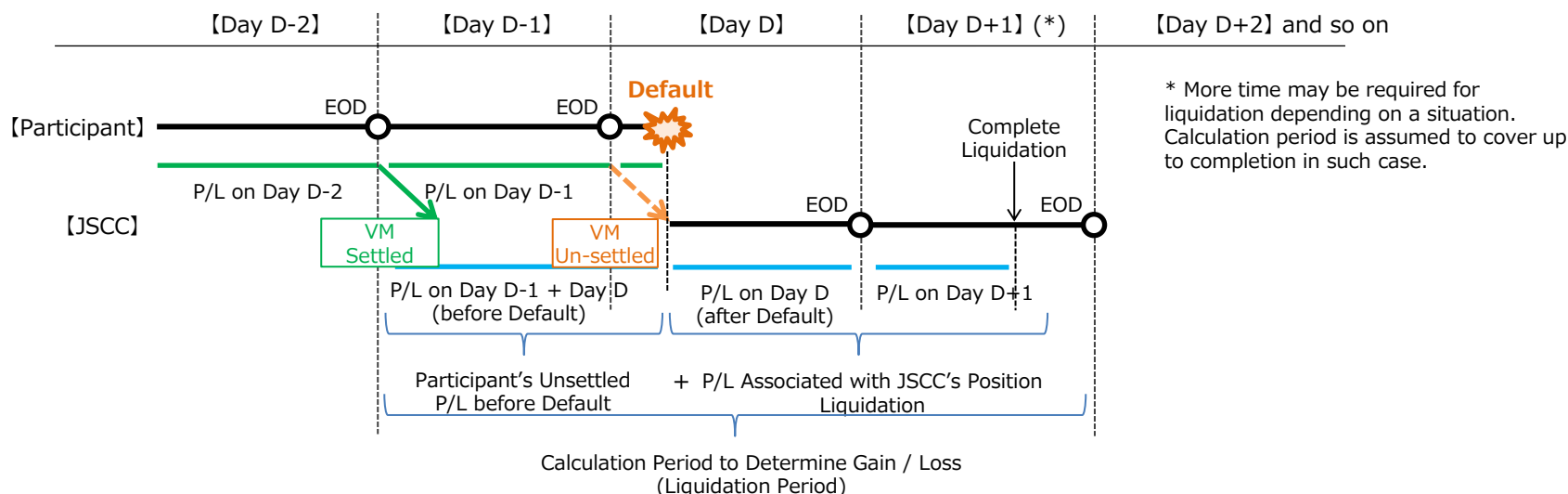
- Securities-related Listed Derivatives Clearing Services
  - JGB Futures Clearing Qualification, Index Futures Clearing Qualification
- Commodity Derivatives Clearing Services
  - Precious Metal Futures Clearing Qualification, Rubber Futures Clearing Qualification, Agricultural Futures Clearing Qualification
  - Energy Futures Clearing Qualification
  - Dojima Agricultural Futures Clearing Qualification, Dojima Sugar Futures Clearing Qualification

## Annex 2. Outline of VM-OP Premium Equivalent Calculation Method related to Second Special Clearing Charge

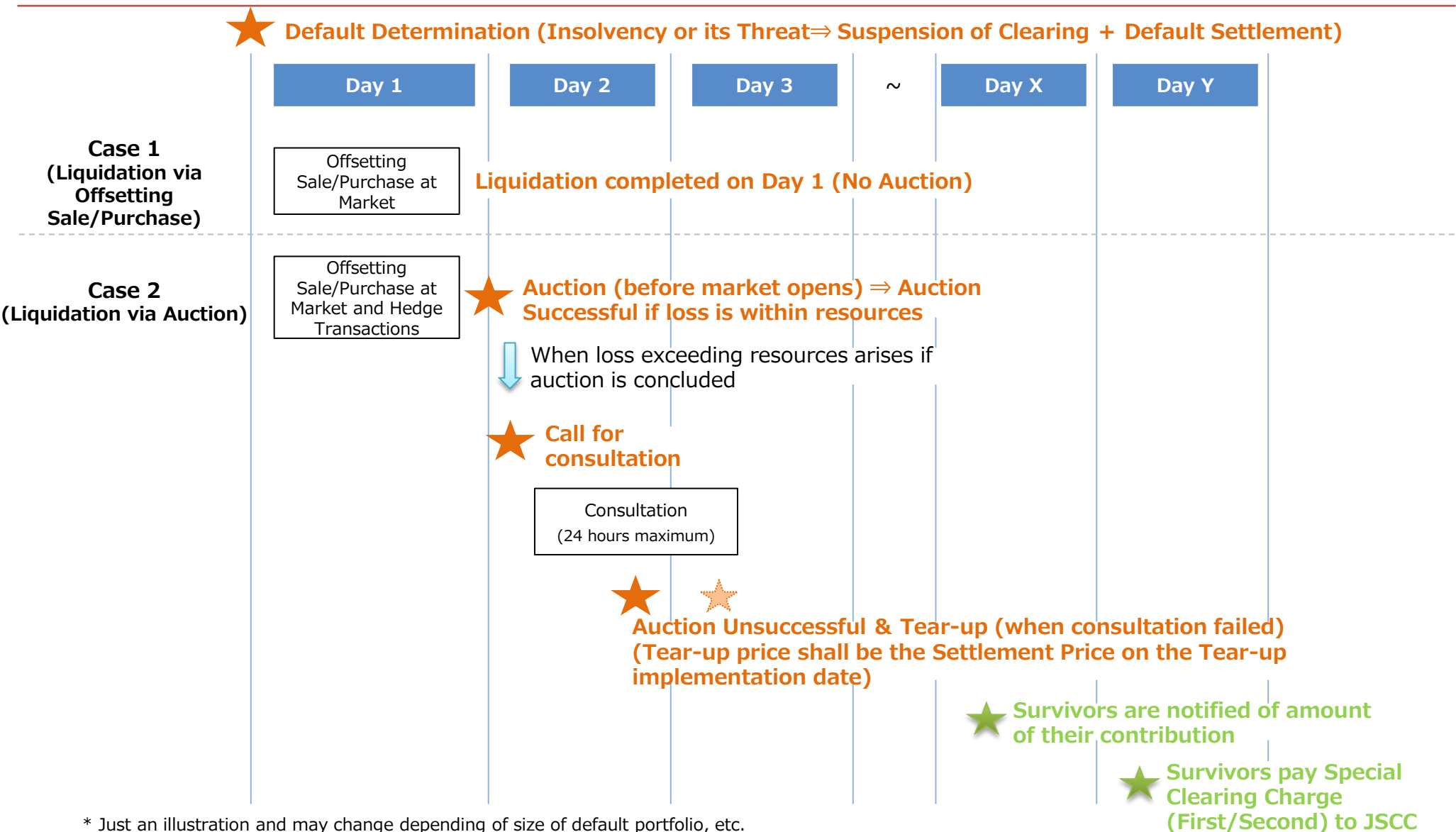
- If resources up to First Special Clearing Charge are insufficient to cover losses associated with a Participant default, JSCC will call contribution from Clearing Participants who is gaining in the VM-OP Premium Equivalent to be settled during the period of time required for defaulter's position liquidation, etc. for each Clearing Qualification. Specifically, **VM-OP Premium Equivalent Gaining Participants shall pay to JSCC as Second Special Clearing Charge the cash amount prorated according to the gaining amount of each VM-OP Premium Equivalent Gaining Participant up to the gaining amount of its VM-OP Premium Equivalent.**
  - **To ensure comprehensiveness of resources, all accounts of a Clearing Participant, both House and Client, shall be subject to the VM-OP Premium Equivalent calculation for Second Special Clearing Charge purpose,** and "In-the-Money Participant" shall be the Clearing Participant whose net VM-OP Premium Equivalent for all accounts is gaining.

### **[Gain / Loss Calculation Coverage (Liquidation Period)]**

- As JSCC's P/L associated with Clearing Participant's default is comprised of defaulter's unsettled P/L and P/L arising from JSCC's position liquidation, Gain / Loss calculation for Second Special Clearing Charge (i.e., VM-OP Premium Equivalent to be settled for the liquidation period) shall cover the period from the settlement on the default date (P/L on the business day before default) to the date on which liquidation associated with default completes (expected to complete within 2 days after default occurrence, in principle).



## Annex 3. Example of Standard Default Settlement Timeline



- \* Just an illustration and may change depending of size of default portfolio, etc.
- \* Ex-post facto contribution from Survivors may be required in both Case 1 and Case 2
- \* Even in Case 2, auction may be successfully concluded in part to the extent necessary.
- \* As a general rule, liquidation of Defaulter's collateral shall be completed by the end of Day 1.

## Annex 4. Outline of Partial Tear-up Method

- When resources up to Second Special Clearing Charge are insufficient to cover losses associated with a Participant default, and agreement on countermeasures to complete default settlement process without Partial Tear-up cannot be reached at consultation, **defaulter's unliquidated position (Partial Tear-up Covered Position) will be allocated to the Survivors with offsetting positions, and only the allocated position (Partial Tear-up Allocated Position) be subject to the early termination (Partial Tear-up).**

- **Both "House" and "Clients" are subject to Partial Tear-up (i.e., position on client's account may also be subject to Partial Tear-up).**
- Quantity of Partial Tear-up Allocated Position for each Clearing Participant shall be determined on pro-rata basis based on the sum total at Clearing Participant level of the **net positive position** in each issue subject to the Partial Tear-up calculated **at account level (Net Quantity by Issue) (net negative quantity shall not be taken into consideration).**
- Allocate Clearing Participant's Partial Tear-up Allocated Position **to each account on pro-rata basis** according to the Net Quantity by Issue.
- Price used at Partial Tear-up (Tear-up Price) shall be the Settlement Price on the Tear-up implementation date.

[Example: Early termination of 100 contracts of long position in Sept. 2019 N225 Futures held by Defaulter]

