

	N°	Title
	V.4-3	THE SERVICE CONTINUITY AND SERVICE CLOSURE PROCESSES FOR TRIPARTY REPOS

Pursuant to Articles 4.3.3.2 and 4.3.3.3 of the Clearing Rule Book.

Article 1 - Scope and interpretation

For the purposes of this Instruction, the following definitions will apply:

"Available Resources" means, in respect of any Loss Distribution Period or Service Closure Period, the aggregated amount which is available to be paid by LCH SA for application in meeting any loss suffered or incurred by LCH SA in accordance with Article 4.5.2.7 (i) to (v) (a) of the Clearing Rule Book as at and including the relevant Last Call Prior to Default.

"Cash Payment" means, in respect of any Clearing Day, the aggregated amount which would be paid by LCH SA to a Non-Defaulting Clearing Member (expressed as a positive number) or by such Clearing Member to LCH SA (expressed as a negative number) on such Clearing Day.

"Cumulative LCH Transfer Cost" means, as determined on any Clearing Day during any Loss Distribution Period or Service Closure Period, the sum of any LCH Transfer Cost for each day from but excluding the relevant Last Call Prior to Default to and including such Clearing Day.

"Final Determination Date" means the Clearing Day subsequent to an Insufficient Resources Determination Date when a Shortfall Allocation (as defined in Article 7 (c)(i)) is to be determined.

"Insufficient Resources Determination Date" means the day on which an Insufficient Resources Determination (as defined in Article 7) is made by LCH SA.

"Last Call Prior to Default" means the most recent Clearing Day on which payments of cover required to be made by Clearing Members were made in full.

"LCH Final Uncovered Loss" means the aggregate of LCH Uncovered Losses arising on each day in a Service Closure Period.

"LCH Transfer Cost" means any cost (converted, where applicable, into EUR at a Rate of Exchange determined by LCH SA in its sole discretion) to LCH SA arising out of transferring the rights and obligations arising out of the Triparty Repo Transactions of a Defaulting Clearing Member to any other Clearing Member or third parties.

"LCH Uncovered Loss" means, in respect of LCH SA, as determined on any Clearing Day in any Loss Distribution Period or Service Closure Period, the amount (which may never be less than zero calculated in accordance with the following formula:

$$(TTRTTCP + CLC) - (AR + TLD)$$

where:

"TTRTTCP" means the TTRTT Cash Payment;

"CLC" means the Cumulative LCH Transfer Cost;

"AR" means the Available Resources; and

"TLD" means Total Loss Distribution; and

the LCH Uncovered Loss as at the Last Call Prior to Default shall be zero.

"Loss Distribution Cap Amount" means, in respect of each Non-Defaulting Clearing Member and any Loss Distribution Period, an amount equal to the product of (i) 100 per cent. and (ii) the contribution of such Non-Defaulting Clearing Member to the Triparty Repo Default Fund as at the last Triparty Repo Default Fund contribution determination date prior to the date when the Event of Default occurred at the beginning of that Loss Distribution Period;

"Loss Distribution Day" means any Clearing Day in a Loss Distribution Period on which LCH SA, prior to calling for: (i) cover in respect of Margin in accordance with the Clearing Rules; and (ii) required Collateral, on such Clearing Day, determines that the LCH Uncovered Loss for that Clearing Day is greater than zero.

"Loss Distribution Period" means the period from, but excluding, the day on which an Event of Default occurs with respect to a Clearing Member to the Clearing Day on which all Service Continuity Contributions in respect of such Event of Default have been paid in full.

"Rate of Exchange" means, for any day, the applicable rate of exchange for converting one currency into another as determined by LCH SA by reference to Reuters.

"Service Closure Period" means the period from and including an Insufficient Resources Determination Date to, but including, a Final Determination Date.

"Total Loss Distribution" means, as determined on the day an LCH Uncovered Loss is being determined, the sum of any Service Continuity Contribution paid by Non-Defaulting Clearing Members from but excluding the relevant Last Call Prior to Default to and excluding such day.

"TTRTT Cash Payment" means the total of all cumulative Triparty Repo Transactions Cash Payments for each Clearing Day from but excluding the relevant Last Call Prior to Default up to and including the Clearing Day upon which LCH Uncovered Losses are being determined.

"Triparty Repo Excess Loss" means the net sum or aggregate of net sums payable by a Defaulting Clearing Member in respect of Triparty Repo business less the proportion of the Capped Amount applicable to the Triparty Repo clearing business under Article 4.5.2.7 (iv) of the Clearing Rule Book,

"Triparty Repo Transactions Cash Payment" means, in respect of any Cash Payment (converted, where applicable into EUR at a Rate of Exchange determined by LCH SA in its sole discretion) and any Clearing Day (a) the amount of any such Cash Payment which would be paid by LCH SA to a Non-Defaulting Clearing Member in respect of the Triparty Repo Transactions of a Defaulting Clearing Member on such Clearing Day (expressed as a positive number) excluding any Cash Payments made by LCH SA to such Non-Defaulting Clearing Member in respect (i) of delivery versus payment transfers and (ii) all Margin payments other than Variation Margin; and (b) the amount of any Cash Payments made by the relevant Non-Defaulting Clearing Member to LCH SA in respect of the Triparty Repo Transactions of a Defaulting Clearing Member on such Clearing Day (expressed as a negative number) excluding any Cash Payments made by the relevant Non-Defaulting Clearing Member to LCH SA in respect (i) of delivery versus payment transfers and (ii) all margin payments other than Variation Margin.

For the purposes of this Instruction, any reference to a Clearing Member, a Defaulting Clearing Member, or a Non-Defaulting Clearing Member shall mean a Triparty Repo Clearing Member, a Triparty Repo Defaulting Clearing Member and Triparty Repo Non-Defaulting Clearing member respectively.

Article 2 - Service Continuity Contribution

On each Loss Distribution Day, each Non-Defaulting Clearing Member shall be required to pay to LCH SA a "**Service Continuity Contribution**" which is equal to the product of (x) the LCH Uncovered Loss in respect of that Loss Distribution Day and (y) the proportion which that Non-Defaulting Clearing Member's contribution to the Triparty Repo Default Fund bears to the aggregate contributions to the Triparty Repo Default Fund of all Non-Defaulting Clearing Members, provided that, the aggregate of all such Service Continuity Contributions shall not be greater than the Loss Distribution Cap Amount in respect of that Non-Defaulting Clearing Member.

Article 3 - Application of Service Continuity Contributions

LCH SA shall apply all payments it receives in respect of Service Continuity Contributions solely for the purposes of meeting any loss incurred by LCH SA following, and in relation to, each Event of Default, as contemplated in accordance with Article 4.5.2.7 (i) to (v) (a) of the Clearing Rule Book.

Article 4 - No Rebate or interest

The payment to LCH SA by any Clearing Member of any Service Continuity Contribution shall be final and shall not give rise to any obligation of LCH SA to repay any such amount or to pay any interest thereon.

Article 5 - Application of any recoveries

If the Triparty Repo Loss Distribution Process has been invoked by LCH SA in accordance with Article 4.3.3.2 of the Clearing Rule Book, LCH SA shall reimburse the Clearing Members (irrespective of whether they remain Clearing Members at the time of the recovery) and LCH SA on a pro rata basis by reference to the resources which have been applied pursuant to Article 4.4.2.7 (i) to (v)(a) (including any Refill Contributions to the Triparty Repo Default Fund) of the Clearing Rule Book and including the net amount of any one or more of the following amounts paid by the relevant Clearing Members:

- (i) any amounts received from the Defaulting Clearing Member as a result of LCH SA being a creditor of the Defaulting Clearing Member in respect of the Triparty Repo business of such Defaulting Clearing Member in the context of the occurrence of any Insolvency Event of Default in respect of the Defaulting Clearing Member or otherwise, other than in respect of sums due to LCH SA for its own account; or
- (ii) any other amounts howsoever obtained or recovered in the course of LCH SA's operation of the Triparty Repo default management process (as set out in an Instruction) or which are otherwise referable to the Defaulting Clearing Member,

in each case net of any related expenses incurred by LCH SA or other sums owing to LCH SA by the Defaulting Clearing Member in connection with the Triparty Repo Clearing Service. For the avoidance of doubt, nothing in this Article shall oblige LCH SA to pursue any litigation or other action in order to recover the amounts contemplated above and if another Default Fund of LCH SA has also been applied as a result of the Clearing Member's Event of Default, any amounts recovered shall be applied *pari passu* as between the relevant Default Funds.

Article 6 –Voluntary payments

Where, after an Event of Default in relation to one or more Clearing Members, LCH SA determines that, notwithstanding the availability of any resources remaining under Article 4.5.2.7 (i) to (v)(a) of the Clearing Rule Book and the availability of the Triparty Repo Loss Distribution Process in accordance with the terms of Article 4.3.3.2 of the Clearing Rule Book, (i) LCH SA does not have sufficient resources to meet its obligations and liabilities arising in respect of those Trade Legs and Open Positions to which it is party with non-defaulting Clearing Members, or (ii) the Service Continuity Contribution for any non-defaulting Clearing Member would be greater than the Loss Distribution Cap Amount in respect of that non-defaulting Clearing Member. LCH SA may by notice in writing (a "Triparty Repo Voluntary Payment Notice"): (i) inform all non-defaulting Clearing Members that it has insufficient resources and that it is likely to invoke Article 7 below; and (ii) invite each non-defaulting

Clearing Members to make a payment of funds (a "Triparty Repo Voluntary Payment"), in accordance with Article 4.5.2.7 (v)(c) of the Clearing Rule Book, to make up for the relevant shortfall.

Triparty Repo Voluntary Payments will be made on the following terms:

- (a) no Clearing Member shall be obliged to make a Triparty Repo Voluntary Payment;
- (b) any Triparty Repo Voluntary Payment will be made by a Clearing Member by the close of business on the Clearing Day immediately following the date of receipt of the relevant Triparty Repo Voluntary Payment Notice;
- (c) no Triparty Repo Voluntary Payment may be withdrawn once made; and
- (d) LCH SA shall have full discretion whether or not to accept a particular Triparty Repo Voluntary Payment.

Any failure by LCH SA to deliver a Triparty Repo Voluntary Payment Notice pursuant to this Article 6 will not invalidate any action taken by LCH SA pursuant to Article 7 below nor give rise to any liability whatsoever on the part of LCH SA.

Any Triparty Repo Voluntary Payments remaining unused at the time of the expiry of the relevant Triparty Repo default period will be accounted for rateably by LCH SA as if they were amounts paid in respect of the Triparty Repo Default Fund contributions of those Clearing Members from whom Triparty Repo Voluntary Payments were accepted by LCH SA.

Article 7 –Service closure

Where, following the conclusion of the Triparty Repo Loss Distribution Process, and, as the case may be, after the expiry of the deadline for Triparty Repo Voluntary Payments following an invitation as mentioned in Article 6 above, LCH SA makes a determination (an "**Insufficient Resources Determination**") that LCH SA would not in future have sufficient resources to meet its contractual obligations arising in respect of the Triparty Repo Open Positions resulting from Triparty Repo Transactions of non-defaulting Clearing Members, the following provisions shall have effect:

- (a) LCH SA will promptly notify the Clearing Members active on Triparty Repo Transactions, and will stop accepting, directly or indirectly, and will no longer novate, any new Triparty Repo Transactions for clearing or registration in its Triparty Repo Clearing System after close of business on the date the Insufficient Resources Determination is made;
- (b) LCH SA will, to the extent possible, cancel any settlement instructions in relation to Triparty Repo Transactions and associated Trade Legs and Open Positions which have not yet settled and instruct any CSD of Reference, ICSD and Securities settlement system, directly or indirectly, to cancel any such pending instructions and to stop issuing any new instructions in relation thereto;
- (c) All outstanding Trade Legs and Open Positions resulting from Triparty Repo Transactions already executed and registered shall be closed out immediately at the date the Insufficient Resources Determination is made. Neither LCH SA nor any non-defaulting Clearing Member shall be obliged to make any further payments or deliveries under any Trade Leg and Open Position between them which would, but for this Article 7, have fallen due for performance on or after the date the Insufficient Resources Determination was made, and any obligations to make further payments or deliveries which would otherwise have fallen due with respect to such Trade Legs and Open Positions shall be satisfied by settlement (whether by payment, set-off or otherwise) of the Final Net Payment (as defined below).
- (d) On the basis of the close out values established for each outstanding Trade Leg and Open Position mentioned in paragraph (c) above by LCH SA acting in a commercially reasonable manner, an account shall be taken (as at the time of close out) of what is due in respect of each Clearing Member, from that Clearing Member to LCH SA and from LCH SA to that Clearing Member in respect of such Trade Legs and Open Positions and any other amounts

that may be due in respect of the Triparty Repo Clearing Service (including for these purposes, a proportionate share of any amounts owed to or from LCH SA pursuant to the Clearing Rules), and the sums due from the Clearing Member to LCH SA shall be set off against the sums due from LCH SA to the Clearing Member and, subject to paragraph (e) below, only the net balance shall be payable. For the avoidance of doubt, amounts in respect of such Trade Legs and Open Positions shall include, but not be limited to, returns of Variation Margin (but shall exclude the repayment of any Initial Margin or additional Margin) and amounts due in respect of the Triparty Repo, Clearing Service shall include, but not be limited to, any Service Continuity Contributions payable by that Clearing Member pursuant to Article 2 (but shall exclude the repayment of any outstanding Triparty Repo Default Fund contributions or Refill Contributions); and

- (e) To the extent that (x) the aggregate of all of the net amounts owed to LCH SA by Clearing Members pursuant to paragraph (d), above, plus all of those other resources applicable to the Triparty Repo Clearing Service under Article 4.5.2.7 (i) to (v) (a) of the Clearing Rule Book (excluding for these purposes assets representing Initial Margin or additional Margin of non Defaulting Clearing Members) that have not been applied towards a Triparty Repo Excess Loss (the "Triparty Repo Final Resources") are less than (y) the LCH Final Uncovered Losses, the amount by which (y) exceeds (x) shall be the "**LCH Closure Shortfall**":
- (i) the LCH Closure Shortfall (as defined above) shall be allocated between the Clearing Members based upon the proportion which that non-defaulting Clearing Member 's contribution to the Triparty Repo Default Fund bears to the aggregate contributions to the Triparty Repo Default Fund of all non-defaulting Clearing Members (the amount allocated to each such Clearing Member being the "Shortfall Allocation" in respect of that Clearing Member); and each Clearing Member shall (subject to sub-paragraph (e)(iv) below) make a new cash payment to LCH SA in respect of its Shortfall Allocation, (a "**Service Closure Payment**");
 - (ii) the Service Closure Payment owed by a Clearing Member to LCH SA in accordance with sub-paragraphs (e)(i) above will be capped at the highest daily value of the sum of Triparty Repo Net Position Exposures registered in the non-Defaulting Clearing Member's House Margin Account(s) and Triparty Repo Net Position Exposures registered in such non-Defaulting Clearing Member's Client Margin Accounts between the date the relevant Event of Default is declared and the Insufficient Resources Determination date (the "**Service Closure Cap Amount**");
 - (iii) for any non-Defaulting Clearing Member for whom the Service Closure Payment as determined pursuant to sub-paragraph (e)(i) above exceeds the the Service Closure Cap Amount as determined pursuant to sub-paragraph (e)(ii) above, such excess shall be allocated amongst the other non-Defaulting Clearing Members who have not yet reached their Service Closure Cap Amount on the basis of the proportion which each such non-Defaulting Clearing Member's contribution to the Triparty Repo Default Fund bears to the aggregate contributions to the Triparty Repo Default Fund of all non-Defaulting Clearing Members who have not yet reached their Service Closure Cap Amount. This exercise will be repeated if necessary until all non-Defaulting Clearing Members reach their Service Closure Cap Amount;
 - (iv) the Service Closure Payment owed by a Clearing Member to LCH SA in accordance with in sub-paragraphs (e)(i) and (e)(iii) above shall be set off against the sums owed by LCH SA to that Clearing Member in accordance with sub-paragraph (d) above and only the net balance shall be payable in

cash by either the Clearing Member or LCH SA, as applicable (the "Final Net Payment").

- (f) Where a Clearing Member owes an amount to LCH SA under Article 7(d) or if a Service Closure Payment is due by a Clearing Member to LCH SA under Article 7 (e), that Clearing Member shall pay that amount to LCH SA immediately. Failure to make this payment shall constitute a Contractual Event of Default. Where a Clearing Member is owed an amount by LCH SA under Article 7 (d), or if a Final Net Payment is due by LCH SA to the Clearing Member under Article 7 (e)(iv), LCH SA shall pay that amount to the Clearing Member immediately, subject to paragraph (g) below;
- (g) LCH SA may make the payments due under paragraph (f) above in one or more instalments to the Clearing Members in proportion to the value of their claims on LCH SA under paragraphs (d) or (e) above if all of the amounts due to LCH SA under paragraph (e) above or Article 4.5.2.7 (i) to (v) (a) of the Clearing Rule Book have not yet been received by LCH SA. No interest will be payable by LCH SA on any instalments. LCH SA may take reasonable steps to recover such amounts and may deduct therefrom reasonable administration costs for such recovery. To the extent that LCH SA determines that any such amounts will not in fact be recoverable in full, it shall re-determine the amounts due to Clearing Members in accordance with this Article 7. To the extent that LCH SA ultimately recovers amounts in excess of the LCH Closure Shortfall it shall return such amounts to the relevant Clearing Members (other than a Defaulting Clearing Member) and to the extent that such amounts have been received as Service Closure Payments, it shall return such amounts to the Clearing Members (other than a Defaulting Clearing Member) in proportion to their Shortfall Allocations;
- (h) If at any stage during the operation of this Article 7 LCH SA default occurs as set out in Title 1 Chapter 4 of the Clearing Rule Book, the provisions of Title I Chapter 4 of the Clearing Rule Book shall prevail with respect to the Trade Legs and Open Positions registered in the Account Structure of the non-defaulting Clearing Members;
- (i) Nothing in the foregoing shall override the obligation of LCH SA to return Initial Margin or additional Margin provided by way of security to a non-defaulting Clearing Member pursuant to the Clearing Rules. In addition, the payment in full by LCH SA of any Final Net Payment, as the case may be, to a non-defaulting Clearing Member shall be final and the Clearing Member shall have no further recourse to LCH in respect thereof.