SECURITIES AND EXCHANGE COMMISSION  
(Release No. 34-83691; File No. SR-LCH SA-2018-003)  

July 24, 2018  

Self-Regulatory Organizations; LCH SA; Order Approving Proposed Rule Change Relating to Liquidity Risk Management  

I. Introduction  

On June 4, 2018, Banque Centrale de Compensation, which conducts business under the name LCH SA (“LCH SA”), filed with the Securities and Exchange Commission (“Commission”), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act”), 1 and Rule 19b-4 thereunder, 2 a proposed rule change (the “Proposed Rule Change”) to amend its Risk Management Procedures (the “Procedures”) to adopt a Liquidity Risk Modelling Framework (the “Framework”). The proposed rule change was published for comment in the Federal Register on June 22, 2018. 3 The Commission has not received any comments on the proposed rule change. For the reasons discussed below, the Commission is approving the proposed rule change.  

II. Description of the Proposed Rule Change  

The Framework 4 describes the Liquidity Stress Testing framework by which the Collateral and Liquidity Risk Management department (“CaLRM”) of LCH Group Holdings Limited (“LCH Group”) assures that LCH SA has enough cash available to  

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4 Capitalized terms used herein but not otherwise defined have the meaning set forth in the Framework and LCH SA rulebook, which is available at https://www.lch.com/system/files/media_root/CDSClear_Rule_Book_04.01.2018.pdf.
meet any financial obligations, both expected and unexpected, that may arise over the liquidation period for each of the clearing services that LCH SA offers. The Framework compliments other policies and procedures LCH uses to manage its liquidity risk, i.e., the risk that LCH SA will not have enough cash available, in extreme but plausible circumstances, to settle margin payments or delivery obligations when they become due, in particular upon the default of a clearing member. Such policies and procedures include, among others: (i) the Group Liquidity Risk Policy; (ii) the Group Liquidity Plan; (iii) the Group Financial Resource Adequacy Plan; (iv) the Group Collateral Risk Policy; (v) the Group Investment Risk Policy; and (vi) the LCH SA Collateral Control Framework. The Framework complements these existing policies and procedures and develops further the Group Liquidity Risk Policy.

The Framework: (i) identifies LCH SA’s sources of liquidity and corresponding liquidity risks; (ii) identifies LCH SA’s liquidity requirements with respect to its members and its interoperable central counterparty (“CCP”), Cassa di Compensazione e

Notice, 83 FR at 29146.

LCH SA, a wholly owned subsidiary of LCH Group, manages its liquidity risk pursuant to, among other policies and procedures, the Group Liquidity Risk Policy and the Group Liquidity Plan applicable to each entity within LCH Group.

In addition to its CDSClear service, LCH SA provides clearing services in connection with cash equities and derivatives listed for trading on Euronext (EquityClear), commodity derivatives listed for trading on Euronext (CommodityClear), and tri-party Repo transactions (RepoClear).

Notice, 83 FR 29146-29147.

Notice, 83 FR 29147.

Id.
Garanzia (“CC&G”);  
(iii) describes the metrics and limits that LCH SA monitors regarding liquidity risk; and (iv) describes the scenarios under which these metrics are computed.

The proposed Framework identifies the main sources of liquidity available to LCH SA, including cash and non-cash collateral, and assigns non-cash collateral to one of three tiers. Tier 1 assets are limited to those securities that are deemed to be of sufficient quality and demand to generate liquidity at little or no loss in the event of a default of a clearing member or a major market stress. LCH SA is able to pledge these securities to the Banque de France to generate cash on the same day. Only Tier 1 assets are included as liquidity resources in liquidity stress testing. Tier 2 assets are those securities that have a market and may be financed but are of lesser quality than Tier 1 assets. Tier 3 assets are deemed to have little or no liquidity value in the event of a

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9 LCH SA has an interoperability agreement with CC&G, an Italian CCP, pursuant to which LCH SA’s clearing members and CC&G’s clearing members are able to benefit from common clearing services without having to join the other CCP. Each CCP is a clearing member of the other one with a particular status when accessing the clearing system of the other counterparty.

10 Notice, 83 FR 29147.

11 Id. Securities comprising non-cash collateral are comprised of the following components: (i) margin collateral, i.e., non-cash collateral pledged by clearing members for margin cover; (ii) Collateral and Liquidity Management (“CaLM”) collateral, i.e., direct securities holdings that are part of the CaLM’s investment activities; and (iii) clearing settlement collateral, i.e., collateral resulting from the physical settlement of contracts on behalf of a defaulting clearing member.

12 Notice, 83 FR 29147.

13 Id.

14 Id.

15 Notice, 83 FR 29147, n.6.
default or major market stress or are deemed to be too illiquid to be converted in the timeframe that a CCP would require.\textsuperscript{16}

The Framework highlights the three principal categories under which LCH SA would require liquidity: (i) the default of one or more clearing members; (ii) the default of CC&G; and (iii) operational liquidity needs.\textsuperscript{17}

Liquidity needs arising from clearing members’ defaults are those needs arising from fulfilment of the settlement of the securities of the defaulted clearing member(s); posting of variation margin to non-defaulting members on the positions held by the defaulted clearing member(s); the value of bonds pledged at the Banque de France; haircuts by the European Central Bank on securities posted by the defaulting Clearing Member; and investment losses.\textsuperscript{18}

Liquidity needs arising from the default of CC&G are those needs arising from the service closure of the Italian clearing activity, including reimbursement of the margins and default funds related to the Italian clearing activity and cash settlement of the Italian repo positions.\textsuperscript{19}

Operational liquidity needs relate to the operational management of LCH SA in a stressed environment that does not lead to a member’s default. Such a liquidity requirement may arise from a number of factors, including the need to repay excess cash

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\textsuperscript{16} Notice, 83 FR 29147, n.6.
\textsuperscript{17} Notice, 83 FR 29147.
\textsuperscript{18} Id.
\textsuperscript{19} Id.
posted by members, the need to repay margin when margin requirements are reduced, and the substitution of cash collateral and European Central Bank eligible securities.\textsuperscript{20}

The proposed Framework describes the metrics used to determine LCH SA’s liquidity needs, which are calculated each day over a five-day period. These metrics include: (i) the liquidity coverage ratio; (ii) a monthly rolling average liquidity buffer; (iii) a daily minimum liquidity buffer; and (iv) required cash collateral.\textsuperscript{21} Moreover, the Framework describes how the liquidity coverage ratio, monthly rolling average liquidity buffer, and daily minimum liquidity buffer are reported to LCH SA senior management daily.

With respect to the liquidity coverage ratio, the Framework explains how the liquidity coverage ratio is determined for each of the clearing services that LCH SA offers in a Cover 2 scenario, \textit{i.e.}, the liquidity risk arising from the default of at least two clearing group members to which LCH SA has the largest exposures during the 5 days following default.\textsuperscript{22} The Cover 2 amount is computed by aggregating the liquidity risks related to clearing members within the same group across all of LCH SA’s services.\textsuperscript{23} The two largest group members are chosen according to the liquidity needs related to these members.\textsuperscript{24} These liquidity requirements are generated by settlement risk, market

\textsuperscript{20} Notice, 83 FR 29147.

\textsuperscript{21} Id.

\textsuperscript{22} Id.

\textsuperscript{23} Id.

\textsuperscript{24} Id.
risk, and ECB haircuts. For the CDSClear service, LCH SA determines the liquidity risk by considering variation margin modelled at member level by applying the most punitive CDS spread widening stress scenario for both ITraxx Main and CrossOver (currently the historical scenario considering the 2007 crisis). The liquidity coverage ratio also considers the provision of liquidity to facilitate settlement including fails, such as delays in posting securities by members. The Framework focuses on the principal risks for which LCH SA must assure that it has sufficient liquidity.

Finally, the Framework describes the reverse stress test that LCH SA runs at least quarterly. The reverse stress test is designed to help determine the limits of LCH SA’s liquidity models and of the Framework by modelling extreme market conditions that go beyond what are considered plausible market conditions over a 5-day time horizon. The Framework stresses seven risk factors independently, and also considers these risk factors together in two combined reverse stress test scenarios, the Behavioural and Macro-economic.

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25 Notice, 83 FR 29147.
26 Id.
27 Id.
28 Id.
29 Id.
III. Discussion and Commission Findings

Section 19(b)(2)(C) of the Act directs the Commission to approve a proposed rule change of a self-regulatory organization if it finds that such proposed rule change is consistent with the requirements of the Act and the rules and regulations thereunder applicable to such organization. For the reasons given below, the Commission finds that the proposed rule change is consistent with Section 17A(b)(3)(F) of the Act and Rules 17Ad-22(e)(7)(i) and (vi) thereunder.

A. Consistency with Section 17A(b)(3)(F) of the Act

Section 17A(b)(3)(F) of the Act requires, among other things, that the rules of LCH SA be designed to promote the prompt and accurate clearance and settlement of securities transactions and, to the extent applicable, derivative agreements, contracts, and transactions, as well as to assure the safeguarding of securities and funds which are in the custody or control of LCH SA or for which it is responsible, and, in general, to protect investors and the public interest.

The Framework would assess the sources of LCH SA’s liquidity needs, including the liquidity needs arising from the default of one or more clearing members and liquidity needs arising from LCH SA operating in a stressed environment that does not lead to a member’s default. The Framework would also identify the sources of liquidity that LCH SA may use to satisfy those needs.

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32 17 CFR 240.17Ad-22(e)(7)(i), (vi).
describe the metrics LCH SA would use to quantify those liquidity needs, and the
tests and reports LCH SA would use to confirm that its sources of liquidity can
satisfy those liquidity needs.

The Commission believes that by setting out in advance the liquidity
needs of LCH SA in stressed market conditions, including member defaults and
stressed environments not leading to member defaults and identifying sources of
liquidity to meet those needs, the Framework would increase the likelihood that
LCH SA would have the liquid resources necessary to continue operations in such
stressed market conditions. Specifically, the Commission believes that by
enabling LCH SA to quantify its liquidity needs and confirm that its sources of
liquidity can satisfy those liquidity needs, the Framework would allow LCH SA
to determine whether it has sufficient resources to meet all of its current and
future liquidity needs. The Commission believes that this would, in turn, enhance
LCH SA’s ability to avoid any potential disruptions to its operations caused by
unmet liquidity needs, especially in stressed market conditions, including member
defaults and stressed environments not leading to member defaults.

The Commission therefore believes that the Framework would increase
the likelihood that LCH SA can continue to provide clearing services without
disruption in times of member default or other stressed market conditions not
leading to member default. The Commission finds that this, in turn, would
promote the prompt and accurate clearance and settlement of securities
transactions by reducing the likelihood of a disruption to LCH SA’s operations
arising from a liquidity need. Similarly, the Commission believes the Framework
would help assure the safeguarding of securities and funds which are in the custody or control of LCH SA or for which it is responsible by increasing the likelihood that LCH SA can avoid disruptions to its operations which could impede access to such securities and funds. For both of these reasons, the Commission also believes that the Framework would, in general, protect investors and the public interest.

Therefore, the Commission finds that the proposed rule change would promote the prompt and accurate clearance and settlement of securities transactions, assure the safeguarding of securities and funds in LCH SA’s custody and control, and, in general, protect investors and the public interest, consistent with the Section 17A(b)(3)(F) of the Act.\textsuperscript{34}

B. Consistency with Rule 17Ad-22(e)(7)(i) of the Act

Rule 17Ad-22(e)(7)(i) requires that LCH SA establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively measure, monitor, and manage the liquidity risk that arises in or is borne by LCH SA, including measuring, monitoring, and managing its settlement and funding flows on an ongoing and timely basis, and its use of intraday liquidity by maintaining sufficient liquid resources at the minimum in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of foreseeable stress scenarios that includes, but is not limited to, the default

of the participant family that would generate the largest aggregate payment obligation for LCH SA in extreme but plausible market conditions.\(^{35}\)

As discussed above, the Framework would assess the sources of LCH SA’s liquidity needs, including the liquidity needs arising from the default of one or more clearing members and liquidity needs arising from LCH SA operating in a stressed environment that does not lead to a member’s default. The Framework would also identify the sources of liquidity that LCH SA would use to satisfy those needs, describe the metrics LCH SA would use to quantify its liquidity needs, and the tests and reports LCH SA would use to confirm that its sources of liquidity can satisfy those liquidity needs. These metrics would include: (i) the liquidity coverage ratio; (ii) a monthly rolling average liquidity buffer; (iii) a daily minimum liquidity buffer; and (iii) required cash collateral. With respect to the liquidity coverage ratio, the Framework would explain how the liquidity coverage ratio is determined for each of the clearing services that LCH SA offers in a Cover 2 scenario, \textit{i.e.}, the liquidity risk arising from the default of at least two clearing group members to which LCH SA has the largest exposures during the 5 days following default. Finally, the Framework would describe how these metrics are calculated for each day over a maximum 5 day liquidity period and how the liquidity coverage ratio, monthly rolling average liquidity buffer, and daily minimum liquidity buffer would be reported to LCH SA senior management daily.

\(^{35}\) 17 CFR 240.17Ad-22(e)(7)(i).
The Commission believes that the metrics provided by the Framework would enhance LCH SA’s ability to measure, monitor, and manage the liquidity risk that arises in or is borne by LCH SA. The Commission believes that, for example, by reviewing its liquidity coverage ratio, monthly rolling average liquidity buffer, and daily minimum liquidity buffer on a daily basis, LCH SA would be able to anticipate future liquidity needs and potential shortfalls. Moreover, because the liquidity coverage ratio considers the provision of liquidity to facilitate settlement, including fails as delays in posting securities by members, the Commission believes that review of the ratio would improve LCH SA’s ability to manage the liquidity needs arising from the settlement of transactions. The Commission therefore believes that the Framework would facilitate LCH SA’s ability to measure, monitor, and manage the liquidity risk that arises in or is borne by LCH SA, including measuring, monitoring, and managing its settlement and funding flows on an ongoing and timely basis, and its use of intraday liquidity.

Moreover, by using the liquidity ratio to determine in advance the liquidity needs of LCH SA arising from the default of at least two clearing group members to which LCH SA has the largest exposures during the 5 days following default, the Commission believes the Framework would enhance LCH SA’s ability to determine whether it has sufficient resources to meet its liquidity needs should such a default occur. The Commission believes that this would, in turn, enable LCH SA to avoid any potential disruptions to its operations caused by such liquidity needs arising from such a default. The Commission therefore believes
that the Framework would enable LCH SA to maintain sufficient liquid resources to effect settlement of its payment obligations under a wide range of foreseeable stress scenarios, including the default of the participant family that would generate the largest aggregate payment obligation for LCH SA in extreme but plausible market conditions.

Therefore, for the above reasons the Commission finds that the proposed rule change is consistent with Rule 17Ad-22(e)(7)(i).  

C. Consistency with Rule 17Ad-22(e)(7)(vi) of the Act

Rule 17Ad-22(e)(7)(vi) requires that LCH SA establish, implement, maintain and enforce written policies and procedures reasonably designed to effectively measure, monitor, and manage the liquidity risk that arises in or is borne by LCH SA, including measuring, monitoring, and managing its settlement and funding flows on an ongoing and timely basis, and its use of intraday liquidity by determining the amount and regularly testing the sufficiency of the liquid resources held for purposes of meeting the minimum liquid resource requirement under Rule 17Ad-22(e)(7)(i) by, among other things, conducting stress testing of its liquidity resources at least once each day using standard and predetermined parameters and assumptions.

As discussed above, the Framework would describe the metrics LCH SA would use to quantify its liquidity needs, and the tests and reports LCH SA would

36 17 CFR 240.17Ad-22(e)(7)(i).
37 17 CFR 240.17Ad-22(e)(7)(i).
38 17 CFR 240.17Ad-22(e)(7)(vi).
use to confirm that its sources of liquidity can satisfy those liquidity needs. These metrics would include: (i) the liquidity coverage ratio; (ii) a monthly rolling average liquidity buffer; (iii) a daily minimum liquidity buffer; and (iv) required cash collateral. The Framework would describe how these metrics would be calculated for each day over a maximum of a 5 day liquidity period and how the liquidity coverage ratio, monthly rolling average liquidity buffer, and daily minimum liquidity buffer would be reported to LCH SA senior management daily.

The Commission believes that the metrics provided by the Framework would help LCH SA determine the amount and regularly test the sufficiency of LCH SA’s liquid resources. The Commission believes that the liquidity coverage ratio, for example, would provide LCH SA senior management a view to LCH SA’s liquidity needs in stressed conditions arising from a default of at least two clearing group members to which LCH SA has the largest exposures. As discussed above, the Framework would require the calculation and reporting of the liquidity coverage ratio daily. The Commission believes the other metrics described above would similarly test, and provide LCH SA senior management insight regarding, the sufficiency of LCH SA’s liquid resources.

For the above reasons, the Commission therefore finds that the proposed rule change is consistent with Rule 17Ad-22(e)(7)(vi).39

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III. **Conclusion**

On the basis of the foregoing, the Commission finds that the proposed rule change is consistent with the requirements of the Act, and in particular, Section 17A(b)(3)(F) of the Act and Rules 17Ad-22(e)(7)(i) and (vi) thereunder.

IT IS THEREFORE ORDERED pursuant to Section 19(b)(2) of the Act that the proposed rule change (SR-LCH SA-2018-003) be, and hereby is, approved.

For the Commission by the Division of Trading and Markets, pursuant to delegated authority.

Eduardo A. Aleman
Assistant Secretary

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41 17 CFR 240.17Ad-22(e)(7)(i), (vi).

42 In approving the proposed rule change, the Commission considered the proposal’s impacts on efficiency, competition, and capital formation. 15 U.S.C. 78c(f).