

Interoperability among Clearing Corporations - Amendments to Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2012

1.0 Objective

1.1 This Memorandum presents before the Board, the proposal of 'Interoperability among Clearing Corporations' (hereinafter referred to as 'Interoperability') as well as the proposed amendments to the Securities Contracts (Regulation) (Stock Exchanges and Clearing Corporations) Regulations, 2012 (hereinafter referred to as 'SECC Regulations') in order to enable the framework of interoperability.

2.0 Background

2.1 Over the last two decades, the Market Infrastructure Institutions (MIIs) (e.g. Stock Exchanges, Depositories and Clearing Corporations) in the securities markets, have evolved organically with the stock exchanges being established first, and depositories and clearing corporations being established thereafter. The SECC Regulations mandated setting up of Clearing Corporations (CCPs) as a legal entity, separate from the stock exchange, for the purpose of clearing and settling of trades.

2.2 The three stock exchanges [i.e. BSE, NSE and MSEI (erstwhile MCX-SX Stock Exchange)], established their respective CCPs through the subsidiary route, which clears and settles the trades executed on their parent stock exchanges. This model of trading, clearing and settlement, requires the market participants to take membership of a particular stock exchange and its CCP (or tie-up with a member of that CCP), thereby effectively locking-in the trading, clearing and settlement activities in a closed group of related entities. A market participant is required to take membership of another closed group of related entities to access another trading platform. This above model of membership obligates the market participants to make multiple deployments of margin and capital resources separately at the three stock exchanges/ CCPs, which leads to suboptimal utilization of these resources, thereby increasing costs for the market participants.

2.3 The proposal of 'Interoperability' seeks to address the current suboptimal utilization of margin and capital resources in the securities market, by linking the CCPs and allowing market participants to consolidate their clearing and settlement function at a single CCP, irrespective of the stock exchange on which the trade is executed. It is envisaged that this proposal may lead to efficient allocation of capital for the market participants, thereby saving on cost as well as provide better execution of trades.

2.4 In addition to the benefit of savings on cost, interoperability can also foster efficiency in the capital deployed by the market participants by employing multilateral netting, enabling them to participate in a wider range of trading platforms, and enhance competition among CCPs in terms of price and services they offer. Interoperability also brings in a mechanism to separate the execution risk from the settlement risk, whereby market participants can seamlessly square off their positions in case of stock exchange outages, provided the product is available for trading on other stock exchanges.

2.5 An expert Committee on Clearing Corporation constituted by SEBI in the year 2013, under the Chairmanship of Shri K V Kamath, while, inter-alia, examining the proposal of 'Viability of introducing a single CCP or Interoperability between different CCPs', recommended that, "...at this juncture, moving to a single CC may not be appropriate for the securities market. Preserving the current market structure and maintaining separate clearing corporations for each exchange would be prudent at this stage. However, SEBI may keep the interoperability option open and consider the proposal for implementation when ground conditions are met, which, inter alia, include clear intent of the participants coming together and having a suitable framework in place to the satisfaction of SEBI".

2.6 Thereafter, SEBI invited proposals on 'Interoperability' from CCPs. The proposals so received were placed before the Secondary Market Advisory Committee (SMAC), in its meeting held on December 05, 2017. Taking cognizance of the proposals, the SMAC advised that three working sub-groups on Risk Management, Technology, Finance and Taxation may be constituted

comprising academicians, market participants and relevant stakeholders to examine the related areas and provide its recommendations.

2.7 The report of the working sub-groups were placed before the SMAC in its meeting held on March 07, 2018, wherein, SMAC broadly agreed with the recommendations of the working sub-groups and recommended that the implementation of interoperability may be done in a phased manner, with interoperability of CCPs clearing securities (except commodity derivatives) in the first phase and the CCPs clearing commodity derivatives in the second phase.

3.0 Framework of Interoperability

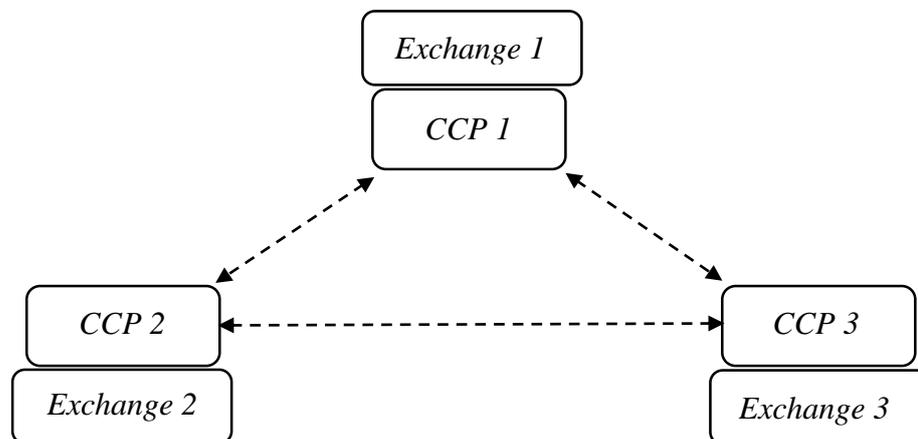
Based on the recommendations of the working sub-groups, the broad framework of the proposed interoperability framework is highlighted in the forthcoming paragraphs -

3.1 **Model** : There are two basic types of links i.e. peer-to-peer link and participant link that may be established across the CCPs:

3.1.1 Peer-to-peer Link

In a peer-to-peer link, a CCP maintains special arrangements with another CCP and is not subject to the normal participant (membership) rules. Risk management between the CCPs is based on a bilaterally approved framework which is different from that applied to a normal market participant and ensures coverage of inter-CCP exposures. CCPs exchange margins and other financial resources on a reciprocal basis, based on mutually agreed margining models. The linked CCPs incur current and potential future exposure to each other as a result of the net positions between the CCPs.

A stylized graphical representation of peer-to-peer link is given below:

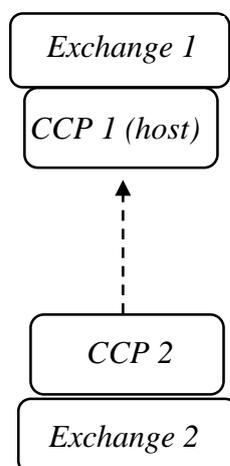


Note - In the above model, all the three CCPs enter into an arrangement with each other (as indicated by the dotted lines), in order to clear and settle the trades on behalf of their constituent members.

3.1.2 Participant Link

In the participant link, one CCP becomes the participant of another CCP (the host CCP) and is subject to the host CCP's normal participant rules. The linked CCPs in this arrangement are not on equal footing when it comes to inter-CCP risk management, as the participant CCP does not receive any financial resources to cover inter-CCP exposures. Since the participant CCP posts margins, but does not collect margins from the host CCP, the participant CCP is required to hold additional financial resources to protect itself against default of the host CCP.

A stylized graphical representation of participant link is given below:



Note - In the above model, CCP 2 becomes the member of CCP 1 (as indicated by the dotted lines) to clear and settle the trades of its constituent members.

3.1.3 **Recommendation of the working sub-group:** The peer-to-peer model is the preferred model for interoperability. SEBI may set specific criteria to determine the CCPs that qualify for the participant or peer-to-peer link model and review each CCP annually to assess whether the CCP continues to meet the criteria or not.

3.1.4 **Proposal:** Peer to peer model, as recommended by the working sub-group, appears more desirable as it ensures that all recognised CCPs are on equal footing. It is, therefore, proposed that CCPs who are recognised to provide clearing and settlement services to stock exchanges, would be mandated to establish peer-to-peer interoperable link. CCPs, which have been granted conditional recognition, however, would be required to establish participant interoperable link till the conditions of recognition are met with. On fulfilling these conditions the recognised CCPs would move to peer-to-peer interoperable link.

3.2 Inter-CCP Risk Management

3.2.1 In addition to the credit risk (i.e. default by members) faced by the CCPs, the additional risk faced by interoperable CCPs is the inter-CCP credit risk or counterparty credit risk, resulting from exposures between interoperable CCPs. The inter-CCP credit risk is the risk when one CCP which is party to an interoperable arrangement, is unable to honour its obligations to its interoperable counterparty CCP, when due, or at any time in the future.

3.2.2 The flow of funds and securities between the interoperable CCPs would be for the purpose of meeting margin requirements or delivery requirements. Failure to honour either of the obligations by an interoperable CCP, would put the counterparty CCP at risk of potential losses.

3.2.3 **Recommendation of the working sub-group:** To begin with, the margining framework may be conservative with the margining norms being eased, as and when the framework is found to be robust.

3.2.4 **Proposal:** To manage and mitigate the inter-CCP exposures, it is necessary for the CCPs to exchange sufficient collateral (based on the model of interoperability) so as to provide a high degree of confidence that any default by a CCP, in an interoperability arrangement, would be covered without financial loss to the surviving CCP. Towards this end the inter-CCP margins shall include two components viz.

(a) Margins as per the existing Risk Management Framework (initial margin, extreme loss margin, calendar spread etc.) prescribed by SEBI and,

(b) Additional capital, to be determined by each CCP, based on the credit exposure from the linked CCP, on which no exposure shall be granted. Considering that the CCPs would not be contributing to each other's Core Settlement Guarantee Fund, this additional capital without exposure would act as a buffer and aid in the absorption of losses arising due to default by an interoperable CCP.

3.3 **Default Handling Process**

3.3.1 In the interoperable scenario, the linked CCPs would require sufficient resources to cover losses arising from default of counterparty CCP, with minimum market disruption.

3.3.2 **Recommendation of the working sub-group:** In case of default by an interoperable CCP, the non-defaulting CCP would activate the default waterfall prescribed by SEBI vide circular dated August 27, 2014.

3.3.3 **Proposal:** In case of default by a CCP in the interoperable arrangement the collateral provided by such CCP would be utilized by the surviving

CCP, as per the default waterfall prescribed vide SEBI circular dated August 27, 2014, to cover losses arising from such default. However, in case of default by a constituent clearing member of a CCP, the collateral provided by the other CCP shall not be utilized.

3.4 Dispute Resolution

- 3.4.1 Any dispute arising out of interoperable links would require efficient and timely resolution. Therefore, a robust dispute resolution mechanism needs to be put in place to ensure smooth, fair and transparent resolution of the issues that may arise from such interoperable links.
- 3.4.2 **Recommendation of the working sub-group:** An Oversight Committee should be established comprising representatives of all linked CCPs, Depositories and external experts for resolving inter-CCP disputes regarding, inter-alia, risk management, collateral obligations, settlement obligations, default handling, commercial and competitive issues. SEBI should empower the Committee with powers to arbitrate such disputes.
- 3.4.3 **Proposal:** As recommendation by the working sub-group, a mechanism for dispute resolution may be put in place. The SECC Regulations enable the setting up of a Conflict Resolution Committee (CRC) for independent oversight and review of potential conflicts arising out of cross listing of stock exchanges. It is proposed that CRC be empowered to resolve disputes arising out of interoperability.

3.5 Products

- 3.5.1 The accrued benefits of interoperability would be higher if large number of exchange traded products are available for trading, clearing and settlement under the interoperable framework.
- 3.5.2 **Recommendation of the working sub-group:** Interoperability may be permitted for all exchange traded products in the first phase, except for

long-dated options and commodity derivatives, which may be permitted in the second phase.

- 3.5.3 **Proposal:** As recommended by the working sub-group, all the products available for trading on the stock exchanges, may be made available under the interoperability framework in a phased manner. Based on experience gained, interoperability will be considered for commodity derivatives in the next phase.

3.6 “This Para has been excised for reasons of confidentiality”

3.7 Technology related issues

- 3.7.1 Currently, a stock exchange (trading venue) is located in close proximity with the risk management system of the CCP. In an interoperable scenario, the trading venue and the CCP may not be situated at the same premises. This may lead to delay in the flow of information between the trading venue and the CCP. Such a scenario may hinder real-time risk monitoring and mitigation, thereby leading to additional credit risk for the CCP.
- 3.7.2 **Recommendation of the working sub-group:** In order to address the above issue, the working sub-group recommended that each interoperable CCP shall deploy a server named ‘CCP Slave’ consisting of the CCPs own risk management rules, at each of the linked trading venues. The CCP’s own risk management system would be called the ‘CCP Master’ which would communicate with the ‘CCP Slave’ for the purpose of reconciliation of margins, positions, collateral and other risk related parameters.
- 3.7.3 **Proposal:** Real time flow of information is essential so as to ensure real-time risk management. Therefore, the recommendation of the working sub-group may be accepted.

4.0 Legal Issues:

4.1 Agreement between stock exchange and clearing corporation.

The framework of interoperability envisages a multi-party agreement between the trading venue and multiple clearing venues (CCPs). In order to provide a legal basis for this multi-party agreement between the trading venues and multiple clearing venues, it is necessary that the legal framework governing the securities market recognizes and supports such link arrangements.

4.2 The Regulation 37 of SECC Regulations permits link arrangement between a stock exchange and a clearing corporation. However, it does not support a multi-party agreement between stock exchanges and multiple clearing corporations.

4.3 The Regulation 37 of SECC Regulation states the following:

“37. (1) Subject to provisions of sub-regulation (2), a recognised stock exchange shall avail the service of a recognised clearing corporation pursuant to an agreement in writing between them stipulating their rights and obligations, the conditions for admission of securities for clearing and settlement, risk management measures, charges for clearing and settlement and other incidental and consequential matters.

(2) The recognised stock exchange shall extend its arbitration mechanism for settlement of disputes or claims arising out of clearing and settlement of trades executed on such stock exchange.”

4.4 Amendment to Regulation 37 of SECC Regulations, 2012

Proposal: In order to recognize and support the multi-party agreement between stock exchanges and multiple clearing corporations, it is proposed to insert a proviso to Regulation 37(1) of the SECC Regulations to read as under.

“37 (1)...

Provided that in case a stock exchange enters into an arrangement with more than one clearing corporation, it shall enter into a multi-partite agreement in

writing with such clearing corporations to ensure interoperability among the clearing corporations.”

4.5 **Novation**

In addition to the above, it may be highlighted that the definition of ‘Novation’ under the extant regulatory framework is understood to be a CCP interposing itself between two parties to every trade, thereby becoming the legal counterparty to both the parties.

Under interoperability links, for each trade there would be two CCPs fulfilling the obligations on behalf of the two counterparties, therefore leading to two CCPs interposing themselves between the two parties.

4.6 The Regulation 2(1)(k) of SECC Regulation, 2012 states the following:

2(1)...

(k) "novation" means the act of a clearing corporation interposing itself between both parties of every trade, being the legal counterparty to both;

4.7 **Amendment to Regulation 2(1)(k) of SECC Regulations 2012**

Proposal: Accordingly, in order to support the framework of interoperability, it is proposed to amend Regulation 2(1)(k) of the SECC Regulations to enable two CCPs to interpose in a trade and become legal counterparty to each other. The amended Regulation 2(1)(k) shall read as under –

“2(1)...

(k) "novation" means the act of one or more clearing corporations interposing between the parties of every trade, so as to be a legal counterparty.”

5.0 **Global Experience**

5.1 There are interoperable links in the European Union (EU), linking authorised EU CCPs such as EuroCCP NV, SIX x-clear, LCH.Clearnet Ltd. The interoperability arrangements between these CCPs, is in the form of peer-to-peer link and predominantly equity products are cleared. All the CCP links are bilateral and margins are exchanged as a first way of mitigating inter-CCP counterparty risk.

5.2 Hong Kong Stock Exchange has participant link agreement with Shanghai Stock Exchange to ensure mutual market access for equity products between the two exchanges, thereby agreeing to clear their trades through their local clearing houses.

6.0 Proposal

The Board is requested to consider and approve the following –

6.1 In order to implement the proposal of interoperability, amendment to Regulation 2(1)(k) and Regulation 37 of the SECC Regulations, 2012.

6.2 Proposals under paragraphs 3.1.4, 3.2.4, 3.3.3, 3.4.3, 3.5.3, 3.6.3, 3.7.3, 4.4, 4.7 and operationalizing the same through issuance of a comprehensive circular.

6.3 Authorize the Chairman to take consequential and incidental steps to give effect to the decisions of the Board.