

Date: October 17, 2016

Financial Stability Board
Bank for International Settlements
CH-4002 Basel, Switzerland

Respected members of the Board,

RE: Essential Aspects of CCP Resolution Planning – Discussion Note

Indian Clearing Corporation Limited (“ICCL”) is grateful for the opportunity to respond to the Consultation on the *Essential Aspects of CCP Resolution Planning – Discussion Note* (“Note”) published by the Financial Stability Board (“FSB”) on August 16, 2016.

General Comment:-

We would like to begin our response by enumerating a number of non-exhaustive scenarios that may lead to a situation which necessitates the “resolution” of a Central Counterparty (“CCP”). We would like to submit that this non-exhaustive list of scenarios would help bring context to our responses to the “Questions” listed in the Discussion Note.

1. Default of one or more large clearing members due to non-systemic reasons
2. Default of one or more large clearing members due to systemic reasons
3. Default of one or more custodians of funds / securities of the CCP
4. Large investment losses on CCP’s own funds and / or Default Fund and / or margins and collaterals received from its clearing members / clients.
5. Liquidity squeeze

It is well understood, and reference in the Note as well that scenarios not envisaged under the extreme but plausible scenarios would be the ones that may force a CCP towards resolution. Given the exceptional nature of such an event, the market would require as much certainty as is possible in executing the tools necessary to restore market stability. This is best achieved by allowing the CCP to execute its own, regulator approved, recovery plans, which would include tools that have been developed using the guidance provided by CPMI IOSCO’s *Recovery of financial markets infrastructures* report in consultation with their clearing members and reviewed by the appropriate regulators. Recovery tools are defined in the CCP’s rulebook and are crucial to clearing members and market participants to enable them to measure, manage and control their exposures to the CCP during a severe market stress. Resolution should only be triggered if it is necessary to provide for continuity of clearing services and market stability once recovery measures are exhausted.

The Note does not provide for recovery options due to liquidity shortfalls – and does not list “collateralised access to Central Bank liquidity” as part of the recovery / resolution

solution. We submit that CCPs being identified as “Systemically Important Financial Institutions” in many jurisdictions, a framework for accessing Central Bank liquidity to provide support to illiquid, but not insolvent, CCPs in times of stress; since at times of market stress, liquidity resources from banks or other third-party institutions, both of whom may also be participants of the CCP, and may also be facing liquidity crunch, cannot be relied upon. We have seen example of this during the 2008 Financial Crisis in US, when banks stopped lending to each other and the Federal Reserve System had to create policies on the fly to lend to all kinds of institutions (fortunately, CCPs around the world did not at that time require any liquidity support). Without a policy, in times of stress, there is also a possibility that a differentiation would be made between CCPs directly regulated by the Central Bank and CCPs who are not; due to inability of the Central Bank to lend to entities not directly regulated by itself or for any number of other reasons.

Response to Specific Questions:-

Q1. Does this discussion note identify the relevant aspects of CCP resolution that are core to the design of effective resolution strategies? What other aspects, if any should authorities address?

The Note has been quite comprehensive in recognizing the various scenarios that may force a CCP into resolution, as well as the tools that may be available to the resolution authority in such scenarios, recognizing the unique aspect of CCP operations. We believe, however, that the Note, while focusing on the allocation of “losses” under various default and non-default scenarios (Principle 4 of the PFMI), has not given sufficient notice to the liquidity measures that may force a CCP into resolution (Principle 7 of the PFMI) and the role of Central Bank in the recovery / resolution process of the CCP.

Incentive effects of resolution strategies

Q2. What is the impact on incentives of the different aspects of resolution outlined in this note for CCP stakeholders to support recovery and resolution processes and participate in central clearing in general? Are there other potential effects that have not been considered?

It is understood, as also referenced in the Note, that scenarios which do not fall under the definition of extreme but plausible, may be the ones that would push a CCP towards resolution. It is therefore appropriate to create incentives (and disincentives) to ensure the market participants participate in the recovery process, rather than make financial calls on whether they would benefit more through the resolution of the CCP under NCWO aegis. It is important to note that the focus should be on CCP recovery and not resolution, to avoid a situation where clearing members may be incentivised to allow recovery to fail due to benefits they may receive in resolution. We do believe that there may be a benefit from creating additional incentives in the recovery and default management process, provided such benefits do not perverse the incentives for CCP recovery. Specifically, incentives should encourage clearing members to actively participate in the default management process which will help return the CCP to a matched book and avoid the use of extreme recovery tools. One of the incentives CCPs have started implementing is forced

allocation and loss mutualisation to those members who have shown poor performance in the auction for portfolios and positions. We believe, additional incentives for such members, in the form of relaxation from the “leverage ratio” under Basel III would be welcome, since the extant guidelines do not allow offsetting margin held against client exposures, and the members actively working towards returning the CCP to a matched book may find the cost of doing so prohibitively high.

The CCP should be given an opportunity to run its regulator-reviewed recovery plan, which will include incentives to encourage clearing participants’ behaviour towards promoting CCP recovery. Without these incentives, participant behaviour may not align with the interests of the broader market. Presumption of early resolution or early intervention of the RA could undermine recovery efforts if the known incentive structure is skewed or if clearing members determine that resolution would be likely to give them better returns.

The incentives created by the CCP in its recovery plan are designed to ensure active participation of clearing members in the default management process. As this situation is most likely the result of multiple members defaulting to the CCP, restoration of a matched book is the most crucial step in returning to market stability. Until the defaulters’ positions can be moved off of the CCP’s books – through auction or, worst case scenario, partial contract tear up – the CCP cannot return to a matched book and losses stemming from the portfolio will persist. Without participation from clearing members and participants, CCPs cannot guarantee a successful auction of the defaulters’ positions. Skewing the incentives, through early intervention or the presumption of early intervention by the RA, will jeopardise the success of the auction and create the risk of a continued unmatched book and lingering losses.

The incentives defined in the CCP rulebook and default management plan are part of the membership agreements for clearing members. These firms have signed up with the CCP and explicitly agreed to participate in the default management process or suffer the consequences defined in the rulebook and plans. These consequences must be sufficiently burdensome to ensure clearing members are properly incentivised to participate in the process. Existing incentives meet market needs while avoiding perverse incentives that would encourage clearing members to allow the recovery to fail. As they have already signed up to abide by these rules and be subject to these plans, clearing members are fully aware of their obligations and requirements under these circumstances and can reasonably be expected to understand their potential liabilities.

Timing of entry into resolution

Q3. What are the appropriate factors for determining timing of entry into resolution? How might a presumptive timing of entry (or range of timing), if any, be defined in light of the criteria set out in the FMI Annex to the Key Attributes? If defined, should the presumptive timing of entry be communicated to the CCP and its participants?

We believe the key to addressing this issue would be a robust, well defined reporting mechanism. The CCP must be required to report to the regulator, in a format jointly designed by the CCP and the regulator, any events that may be significant from the point of view of recovery / resolution. Such reporting may ideally be made before the CCP declares a default / loss and undertakes any action under its recovery plans, but if that is not feasible, immediately after such event. If the regulator believes that the event may qualify to be termed significant for the systemic stability, it may immediately inform the RA; the RA and the regulator may jointly monitor the implementation of the CCPs pre-approved recovery plans. If the RA, in consultation with the regulator, feels that the recovery plans may not be sufficient to return the CCP to a matched book, or that the implementation of the recovery plan would have wide systemic impact; they may force the CCP into resolution. However, an early resolution, without allowing the CCP to run through its recover process, should be exercised with extreme prejudice; since it may create adverse incentives for market participants from participating in the recovery process.

Adequacy of financial resources in resolution

Q4. Should CCPs be required to hold any additional pre-funded resources for resolution, or otherwise adopt measures to ensure that there are sufficient resources committed or reserved for resolution? If yes, what form should they take and how should they be funded?

We believe that CCPs be required to hold additional pre-funded resources for resolution, that would not be available to the CCP towards its recovery. These pre-funded resources should primarily come out of the CCPs equity (with a provision to create a Resolution Fund with CCP and members' contribution), over and above the CCPs equity contribution at various stages of the Default Waterfall.

Q5. How should the appropriate quantum of any additional CCP resources be determined? In sizing the appropriate quantum, what factors and considerations should be taken into account? Do your answers vary for default and non-default losses?

We believe that the pre-funded quantum of resources available for resolution should be a factor of default losses and non-default losses.

Default Losses

A quantum of funds equal to higher 5% of the Default Fund or the Loss due to the default of the 3rd largest clearing member may be provided towards the Resolution Fund.

Non-Default losses

A quantum of funds necessary to ensure on-going operations of the CCP for six months may be provided for.

Q6. Should resolution funds external to the CCP be relied upon? If so, how should such funding arrangements be structured so as to minimise the risk of moral hazard, including

for CCPs with significant cross-border participation? Where these are pre-funded, how should the target size be determined and which entities should be required to contribute?

Resolution funds external to the CCP should not be relied upon, unless pre-funded. Please refer to our response to Q.6 for target sizing. The contribution from external entities may be based on the methodology adopted for Default Fund contribution.

Tools to return to a matched book

Q7. What factors should the resolution authority consider in choosing and exercising tools to return the CCP to a matched book? Is one (or more) of the tools for restoring a matched book preferable over others and if so, why?

The RA should, as far as possible, use tools defined under a CCP's rule book including auctions and forced allocations to members, with partial tear-up or variation gain haircutting at the bottom of the waterfall.

Q8. Should any tools for restoring a matched book only be exercisable by resolution authorities? If so, which tools and subject to what conditions?

We do not believe a CCP should be restricted in the choice of tools it may employ in restoring a matched book. The CCP should be free to create its own recovery plan, duly approved by the regulator, out of the various options laid down in the CPMI-IOSCO paper on Recovery Planning, to restore a matched book. The ability of use of such recovery tools would also encourage market participants to actively participate in the default management process and this ability of the CCP itself may restore market confidence and preclude the use of any further tools.

Allocation of losses in resolution

Q9. What are in your view effective tools for allocating default and non-default losses and what are the pros and cons of these tools? Should initial margin haircutting be considered as a tool for the allocation of losses in resolution? Is one or more of the tools preferable over others? What are your views on the use of tools to restore a matched book as a means of loss allocation?

Effective tools for allocating default losses

We strongly believe that while it would be prudent for RA to have powers to use Initial Margin haircut; it should be used only as a last resort and after various other tools, including Variation Margin Gains haircutting have been exhausted.

Effective tools for allocating non-default losses

We believe that each of the non-default loss scenario would need a different set of tools for loss allocation; more on this has been elaborated in our response to Q. 12 and Q. 13.

Q10. Which, if any, loss allocation tools should be reserved for use by the resolution authority (rather than for application by a CCP in recovery)?

We do not believe a CCP should be restricted in the choice of tools it may employ in restoring a matched book. The CCP should be free to create its own recovery plan, duly approved by the regulator, out of the various options laid down in the CPMI-IOSCO paper on Recovery Planning, to restore a matched book. The ability of use of such recovery tools would also encourage market participants to actively participate in the default management process and this ability of the CCP itself may restore market confidence and preclude the use of any further tools.

Q11. How much flexibility regarding the allocation of losses is needed to enable resolution authorities to minimise risks to financial stability? For example, to what extent should a resolution authority be permitted to deviate from the principle of pari passu treatment of creditors within the same class, notably different clearing members in resolution? What would be the implications of a resolution strategy based primarily or solely on a fixed order of loss allocation in resolution set out in CCP rules vs. a resolution strategy that confers discretion to the resolution authority to allocate losses in resolution differently to CCP rules?

It is crucial for market participants to know the risks they undertake in stress scenarios. These stress scenarios would include recovery and resolution scenarios. CCPs provide this certainty through their Rulebooks. In case the default management process is not adequate and the CCP undertakes recovery tools, the CCP would inform its regulator either before undertaking the recovery actions or immediately thereafter.

However, we do believe that the RA may, in interest of the wider market and systemic stability, may have the ability to use tools different than those defined in the CCP's Rulebook.

There are specific instances where the principle of pari passu may be suspended, for example in the default management process to allow the CCP to apply specific incentives to ensure active auction participation from clearing members. In some circumstances it may be appropriate to suspend pari passu where necessary to create appropriate incentives, provided there is sufficient oversight and consultation from the necessary authorities, as when reviewing the CCP default management process rules. As these tools will be used to create incentives for participants, their application and potential risks will be fully transparent to all participants.

Q12. What are your views on the potential benefits or drawbacks of requiring CCPs to set out in their rules for both default and non-default losses:

We believe the CCP should clearly set out in its rules, its procedure for addressing default and non-default losses. The CCP should also categorise the various non-default losses and may down waterfalls for each of the categories of non-default losses in its rule book; as it would do for its default losses.

Q13. How should non-default losses be allocated in resolution, and should allocation of non-default losses be written into the rules of the CCP?

Our response to Q.12 states that a CCP should have separate default waterfalls for each class of non-default losses which envisages loss allocation amongst its market participants. These waterfalls may also form part of the CCP rulebooks, like the “Default Waterfall”. The allocation of such losses from a non-default event must be based on the source of the losses, the beneficiary (for instance, some CCPs share various percentage of income from investment of margins, with their clearing participants) and the entity responsible for creating the exposure to that loss.

Q14. Aside from loss allocation, are there other aspects in which resolution in non-default scenarios should differ from member default scenarios?

The tools for loss allocation for non-default losses will differ from those available for allocating default losses; NCWO may also apply for such losses.

Q15. What is the appropriate NCWO counterfactual for a resolution scenario involving default losses? Is it the allocation of losses according to the CCP’s rules and tear-up of all the contracts in the affected clearing service(s) or liquidation in insolvency at the time of entry into resolution, or another counterfactual? What assumptions, for example as to timing and pricing or the re-establishment of the CCP’s matched book, will need to be made to determine the losses under the counterfactual?

As stated in response to Q. 14, in case the tools employed during resolution differ from those specified in the CCP’s Rulebook, NCWO may apply. However, Section 8.1 of the Note states that, “To assist with interpreting the NCWO safeguard, authorities should clearly set out in advance the relevant counterfactual and the assumptions and valuation principles that should apply in assessing the losses that participants and other creditors would have borne had the authorities not intervened.” While consider the counterfactual of NCWO, a scenario involving the tools as per the CCP Rulebook may be used, a scenario that may end with the liquidation of the CCP. In case of a complete wind down, all remaining contracts would be torn up, and the replacement cost for such contracts may be the loss the market participants would have to bear in that case.

Q16. What is the appropriate NCWO counterfactual for a resolution scenario involving non-default losses? Is it the liquidation of the CCP under the applicable insolvency regime, assuming the prior application of any relevant loss allocation arrangements for non-default losses that exist under the CCP’s rules or another counterfactual?

The resolution scenario for non-default losses would first include the tools for such losses as per the CCP Rulebook. NCWO counterfactual for residual losses, if any, would be a complete wind down, i.e liquidation as per the provisions of the Insolvency Act applicable in the jurisdiction the CCP is based in.

Q17. How should the counterfactual be determined in cases that involve both default losses and non-default losses?

In such case, the losses would need to be segregated and the combination of our response to Q. 15 and Q.16 may apply.

Equity exchange in resolution

Q18. Should CCP owners' equity be written down fully beyond the committed layer of capital irrespective of whether caused by default or non-default events?

We would like to draw attention to our response to Q. 12 and Q. 13 for allocating default and non-default losses. As part of the Resolution mechanism, while the CCP may be forced to provide a higher “skin in the game” as part of its resolution plan; writing down the entire CCP owners' equity would be devastating to the stability of the CCP. While the CCP may be required to raise additional equity through its existing or new shareholders (which may include its clearing participants), to bring it back to the regulatory minimum to continue to act as a CCP, writing down equity beyond this would not help the market in any way.

Q19. Should new equity or other instruments of ownership be awarded to those clearing participants and other creditors who absorb losses in resolution?

We strongly recommend that the loss allocation for default and non-default losses be conducted as per the tools specified in the CCP's Rulebook and there should be no incentive that should be provided to the clearing participants as it would create a *moral hazard* for the clearing participants against participating in the default management and recovery process since they might get better returns in the form of equity of the CCP if the recovery process fails and losses are allocated to them as part of the resolution process against which they would be rewarded with equity of the CCP. Further, certain clearing participants may be restricted from owning equity in a CCP due to regulations applicable to the CCP, regulations applicable to a particular class of clearing participant or internal guidelines applicable to a clearing participant. This may result in a clear violation of the NCWO principle.

Cross-border cooperation

Q20. What are your views on the suggested standing composition of CMGs (Crisis Management Groups)? Should resolution authorities consider inviting additional authorities to the CMG on an ad-hoc basis where this may be appropriate?

While the terms of the reference of Crisis Management Groups has not been specified in the Note, we believe such CMGs may be used for sharing of information and the CMGs may not be made part of the resolution decision as this would affect a time-bound resolution process; the various members of the CMGs would also have different incentives in participation the resolution action depending on the relative position of the members regulated by them and how they would fare under different recovery and resolution options.

Q21. What should be the nature of engagement with authorities in jurisdictions where the CCP is considered systemically important, for the purpose of resolution planning and during resolution implementation?

Information sharing.

Q22. Should CCP resolution authorities be required to disclose basic information about their resolution strategies to enhance transparency and cross-border enforceability? If so, what types of information could be meaningfully disclosed without restricting the resolution authority's room for manoeuvre?

We believe some transparency regarding the broad framework of the resolution strategies that may be followed by the RA would be beneficial to the market at large. Transparency, with respect to cross-border action would be particularly welcome, while allowing the RA to respond to the market conditions without being bound by a strict, pre-defined plan.

Cross-border effectiveness of resolution actions

Q23. Does this section of the note identify the relevant CCP-specific aspects of cross-border effectiveness of resolution actions? Which other aspects, if any, should also be considered?

The Note adequately covers the various aspects of cross-border effectiveness of resolution actions. However, some more guidance, specifically in case of interoperating, cross-margining and offsetting CCPs may be provided.

Q24. What should be the role, if any, of the suspension of clearing mandates in a CCP resolution and how should this be executed in a cross-border context?

We do not believe this to be a good measure. Suspension of mandatory clearing provides incentives for members to clear their trades bilaterally which would have two adverse effects:-

- i. Unwillingness of members to participate in a recovery process
- ii. Given that the scenario forcing a CCP into recovery is a stress market scenario, bilateral clearing may further exacerbate the stress conditions due to either no collateral or single sided collateral requirements, or on the other extreme procyclical margin calls without the advantage of multilateral netting / portfolio compression.

We would like to express our appreciation for providing us the opportunity of providing our comments to the Note and it would be our pleasure to discuss any of the points addressed by us in this response, in person, or through email, as per your convenience. We may be reached at risk.iccl@icclindia.com.

Yours faithfully,



Piyush Chourasia
Chief Risk Officer & Head Strategy

About ICCL

Indian Clearing Corporation Limited ("ICCL") was incorporated in 2007 as a wholly owned subsidiary of BSE Limited ("BSE"). ICCL acts as the central counterparty and carries out the functions of clearing, settlement, collateral management and risk management in its role as a "recognised Clearing Corporation".

ICCL settles OTC corporate bond trades reported on any stock exchange in India and the Mutual Fund ("StAR MF") Segment of BSE. ICCL clears and settles trades executed on the trading platform of BSE across all asset classes, including Equity Cash, Equity Derivatives, BSE SME, Offer for Sale, Debt Segment, Interest Rate Derivatives and the Currency Derivatives contracts. ICCL also operates a Securities Lending and Borrowing platform in its capacity as an "Authorised Intermediary".

ICCL is the only clearing corporation in India to have been granted "IND AAA" rating by two rating agencies, India Ratings Ltd. (Indian arm of Fitch Ratings) and Care Ratings Ltd.

ICCL has established a robust Risk Management framework which utilises a Value at Risk model for margining of Equity Cash Segment and a risk based SPAN model for all its derivatives transactions, viz. equity derivatives, currency derivatives and interest rate derivatives. ICCL aims to provide secure, capital-efficient counterparty risk management and post-trade services.

20 banks have been empanelled as Clearing Banks for providing clearing and settlement services for trades executed on the BSE platform.

ICCL remains committed to the safety of investors and members and to further add to this security, ICCL has subscribed to a unique Insurance Policy for INR 411.24 Crore (~USD 60 million). The objective of the Policy is to protect ICCL against counterparty defaults, and add a further capital cushion to the ICCL network making the resources of the non-defaulting members even safer.

ICCL has been accorded Qualified Central Counterparty ("QCCP") status by the Securities and Exchange Board of India ("SEBI"). A QCCP member is subjected to lower capital requirements/charges under the Basel III Framework introduced by the Basel Committee on Banking Supervision. The capital requirements for Banks and Primary Dealers in India, for a QCCP like ICCL is subject to the Capital Adequacy Standards and Risk Management Guidelines for Standalone Primary Dealers as prescribed by the Reserve Bank of India ("RBI"). ICCL, as a Qualified CCP, is additionally required to comply with the rules and regulations that are consistent with the Principles for Financial Market Infrastructures ("PFMI") issued by the Committee on Payment and Market Intermediaries ("CPMI") and International Organisation of Securities Commissions ("IOSCO"). These rules and regulations focus on limiting systemic risk and on enhancing transparency and stability in the financial market. A clearing member registered with a

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QCCP like ICCL would be a beneficiary of the enhanced risk management framework of ICCL and would also benefit in the form of lower capital costs.