



**nairobi
securities
exchange**

Discover Opportunity

NSE Derivatives Default Handling Procedure

July 2017



Table of Contents

A. Introduction.....	3
B. Context.....	4
C. Clearing Member Default Handling Procedure	5
D. Trading Member Default Handling Procedure	8
E. Client Default Handling Procedure.....	10

DEFAULT HANDLING PROCEDURE

A. Introduction

There are four main categories of participants in the exchange derivatives market:

- i. The Exchange / Clearing House;
- ii. Clearing Members;
- iii. Trading Members; and
- iv. Clients

A default event can emanate from any of the above participants.

a. Default by Client

Typically, this will be handled by the Trading Member (TM) under whom the defaulting client signed up. The TM is best placed to handle the default because:

- They performed the initial KYC procedures on the Client, and so have all the appropriate details including the Client's credit standing;
- They have been collecting margin from the Client, and so would have the appropriate cash buffer to pay for the costs associated with the closeout of the Client; and
- Participants are required to stand good for their direct clients.

b. Default by Trading Member

Typically, this will be handled by the Clearing Member (CM) under whom the defaulting TM signed up. The CM is best placed to handle the default because:

- They have been collecting margin from the TM, and so have the appropriate cash buffer to pay for the costs associated with the closeout of the TM;
- They have been closely examining the TM with regard to their cash flows and have information about their credit status; and
- A Trading Member is required to stand good for its Clients.

c. Default by Clearing Member

This is handled by the Exchange/ Clearing House. The Clearing House is best placed to handle the default because:

- They set out the criteria for clearing membership and stand above them in the market hierarchy structure; and
- They have some insight into the operations of the CMs through regular reports and disclosures.
- A Clearing Member is required to stand good for its Trading Members.

d. Default by NSE Clear

By substituting itself as the counterparty to all trades, the clearing house assumes a variety of risks that must be managed. The clearing house is exposed to the risk that one or more of its clearing members might default on their outstanding obligations. This exposes the clearing house to credit risks (replacement cost risks) and also to liquidity risks. Another source of risk is the possibility of failure of its settlement banks, or failure of the financial institution where its funds are invested.

Clearing houses therefore maintain their own financial credit lines and capital resources to ensure timely settlements and cover these losses. The placing and investment of these financial resources is governed through internal investment policies.

Further, the Capital Markets Act (The Capital Markets Act, Chapter 485A, Section 22E), provides that a clearing house's processes will take precedence over laws of insolvency, and gives some limited protection for the remaining assets following the default of a clearing house.

B. Context

Terms used in this Procedure, and not defined herein, shall have the meaning as set out in the NSE Derivatives Rules ("the Rules").

The ultimate goal of the handling of a default is:

- To ensure the observance of the defaulting party's obligations towards NSE Clear and the Market;
- To prevent losses for NSE Clear and the Market Participants; and
- To minimize the impact on the market, Clearing Members and NSE Clear's services.

These procedures will apply in the following manner:

1. This procedure starts when a default is already declared (Declaration of Default, as defined in the NSE Rules). The procedure to declare a Clearing Member or Trading Member is in default is described in Section 9 of the NSE Derivatives Rules.
2. NSE Clear Management is responsible for appropriate measures to be taken in close cooperation with relevant stakeholders, especially the Default Handling Working Group and NSE Clear Risk Management Team. Timely and accurate communication to the Regulator and all relevant stakeholders is critical in the default management process. In addition, the NSE Derivatives Risk Management Committee and the Derivatives Market Oversight Committee will be duly informed.
3. Throughout this procedure, the NSE Legal Department will assist in advising NSE Clear Management about legal consequences of any proposed actions.
4. Throughout this procedure, the NSE Operations Department will participate by:
 - Providing information relating to on-going settlements; and
 - Monitoring that no new trades are accepted on the defaulting Clearing Member's behalf.

5. Throughout this procedure, NSE Treasury will monitor and take appropriate action in relation to NSE Clear's funding and cash flow needs. If required NSE Treasury will make use of any available credit facilities and emergency liquidity facilities to ensure continuous operations in the market.
6. The Trading Member and Client procedures borrow heavily from the processes in the Clearing Member Default Handling Procedure. Trading Members and Clearing Members will be required to align the procedures to contextualize them to their internal procedures and policies.

C. Clearing Member Default Handling Procedure

1. If a Clearing Member commits an Event of Default as defined in Rule 9 of the NSE Derivatives Rules, then they are said to be in default. Any party that recognizes the default, be it Operations, Treasury, Corporate Communications, Legal or Risk Management, is required to report it to NSE Clear Management.
2. NSE Clear Management then determines whether there was an actual default, and if so, it warrants a Declaration of Default to be issued to the Clearing Member. If a Declaration of Default is to be issued, then move to step 4.
3. If there is no Declaration of Default to be issued, the matter is passed on to the SRO team to determine the appropriate penalties to be enforced in the event of delayed delivery, rather than a default.
4. The Operations and Risk Management teams will then develop the following reports:
 - i. **Client Report.** These are the total number of Clients that are registered under the Trading Members of the defaulting Clearing Member. This report should include the clients' names, their addresses and key contact details.
 - ii. **Aggregate position** (outstanding open interest). This is the total number of contracts held by the Clients of the Trading Members under the defaulting Clearing Member, for each product and expiry date combination. This aggregate position will be the net of the long and short positions.
 - iii. **Margin position.** This is the sum total of all the collected initial margins held by the NSE for the Clients of the Trading Members under the defaulting Clearing Member.
 - iv. **Cash Position.** This is sum total of all the money in the defaulting Clearing Member's trust account. The report will also have the Client level detail to determine how much each individual Client owes or is owed.
 - v. **Guarantee fund contribution.** This is the total contribution of the defaulting Clearing Member to the SGF.
5. NSE Clear Management will open a separate account, called the Default Trust Account (DTA), where all the monies associated with handling the default will pass through. This is provided for in NSE Derivatives Rule 9.6.3
6. NSE Clear Management shall inform the regulator, The Capital Markets Authority (CMA) and NSE SRO of their decision to issue the Declaration of Default to the defaulting CM, and the circumstances that precipitated the default. CMA will thereafter issue a courtesy communication to the Central Bank of Kenya (CBK) if the defaulting CM is a bank.
7. The defaulting CM will be informed in writing that it is in default, with reference made to the relevant NSE Derivatives Rules on which the Event of Default relates.

8. The NSE Clear Management will inform the SGF Trustees of the default. The SGF Trustees will ensure that:
 - i. The defaulting CM's contribution is sufficiently liquid to fulfil its purpose. If the contribution was in the form of guarantees, then the guarantor should be contacted and asked to furnish cash. The furnished cash will be deposited into the DTA.
 - ii. Depending on the magnitude of risk anticipated, the invested cash portions of the SGF will also be liquidated. If so required, the amounts to be paid out will be transferred into the DTA; and
 - iii. If the extent of the default is such that the impact will reach the contributions of the non-defaulting CMs, then their contributions will also need to be converted into cash or near cash equivalents. These will also be transferred into the DTA.
9. The NSE will inform the non-defaulting Clearing Members of the Event of Default. Representatives from the CMs, alongside representatives from NSE Clear will constitute a Default Handling Working Group (DHWG) that will then be convened.
10. The Risk Management team will establish the value and risks of the collateral and open positions held by the defaulting CM. This analysis will enable the team to recommend a liquidation strategy. The available liquidation options are:
 - i. Porting the positions where possible – this will happen through the TMs under the defaulting CM signing fresh Clearing Agreements with the non-defaulting CMs. In this case, the positions and collateral (margins) will be shifted to the new CM;
 - ii. Auction the positions to one or more relevant parties – for positions that might not garner favourable prices if closed out in the market due to liquidity, complexity or size, appropriate clients will be called up to bid on the positions;
 - iii. Liquidate the positions in the market – for smaller or less complex positions, this method may be preferable to auctioning. This is because of the flexibility afforded by being able to choose the timing of the transactions, and the lower slippage if the execution is done in small sizes rather than one large trade;
 - iv. Allow the defaulting CM to continue to settle – the defaulting CM may be allowed to continue to fulfil its settlement obligations if it is determined by NSE Clear that they can still comply with their settlement obligations. This arrangement would be reviewed on an on-going basis; or
 - v. A combination of two or more of the above options
11. The Trading Members (TMs) that clear through the defaulting CM will be informed of the default. These TMs will be given a period of 24 hours to conclude a fresh Clearing Agreement with any of the non-defaulting CMs. Any TM unable to comply within the timeframe for concluding a fresh Clearing Agreement will also be considered in default and their positions will be closed out.
12. The DHWG will review Risk Management's recommendations for liquidation and recommend an appropriate strategy. In the event that the liquidation has a Profit/ Loss impact on third parties, the documentation will confirm that a fair price obtained, given the conditions under which this liquidation occurred.
13. For the accounts that have been ported, the margins and positions will be reflected under the new CM.

14. In the event the DHWG advises auction of positions, and NSE Clear Management accepts, it will have the discretion select between three and five parties to auction the portfolio. NSE Clear will disclose the positions following receipt of a signed Non-Disclosure Agreement (NDA). The positions will be disclosed no later than the close of business (5pm) on the day of Declaration of Default, and the bids received no later than 8am the following morning. Both deadlines are at the discretion of NSE Clear Management on advice from the DHWG.
NSE Clear Management, on advice from Risk Management, will decide on the acceptability of the incoming bids. Once agreed, the NSE Clear Management will ensure the transfer of the settlement obligations from the defaulting CM to the participant who has acquired the positions.
15. In the case the DHWG advises liquidation of positions in the market, and NSE Clear Management accepts, the Risk Management Team will coordinate the liquidation process in an appropriate manner and timeframe.
16. Default Waterfall – The costs associated with handling the default will be apportioned to collected margins and fidelity funds in line with the Rules, in the following order:
 - i. Margins collected from the defaulting CM
 - ii. Initial Margins collected from the defaulting CM
 - iii. The SGF contribution from the defaulting CM
 - iv. 25% of the SGF contribution from the Exchange. This also includes the investment income from the fund and collected penalties levied on CMs over the life of the fund
 - v. The SGF contribution of the non-defaulting CMs. This will be apportioned in the proportion of their size as per the SGF contribution formula
 - vi. 75% of the SGF contribution from the Exchange.
17. NSE Clear Management will keep track of all the costs associated with the closeout. The charges will be assigned as follows:
 - i. Ported positions – these will attract no charges. Any operational costs borne by the TMs and end clients in this process will not be considered.
 - ii. Auctioned positions – any costs associated with the auctioning of the positions will be settled using the Initial Margins collected against those positions. If the IM is not enough, the SGF contribution of the defaulting member will be applied, after which the default waterfall will be applied.
 - iii. Market liquidated positions – any costs associated with the liquidation of the positions will be settled using the Initial Margins collected against those positions. If the IM is not enough, the SGF contribution of the defaulting member will be applied.
The prices used for closing out the positions will be based on an average execution price for an underlying and expiry date combination across all client positions being closed out.
18. Initial Margin that was unused in the liquidation process will be returned back to the clients. The average execution price for a particular contract and expiry date will be used to determine the closeout price to apply.
19. The defaulter’s SGF contribution balance (if any) will be held until a time when all the claims from the Clearing Members and Clearing House for monies processed on behalf of the defaulting CM to ensure settlement have been heard. This process will be guided by the SGF Rules, and administered by the SGF Trustees.
20. NSE Clear Management will send out a notice to the Market informing participants of the default and the result of its resolution. It will also send regular updates to the Market where necessary.

21. Replenishment of the SGF

- i. CMs who have signed up TMs from the defaulting CM will be required to top up their SGF contribution to reflect their new risk position, as defined in the SGF formula. The amount to be topped up will be announced by the NSE Clear Management on advice from the Risk Management team.
- ii. In the event that more than the defaulting CMs SGF contribution is used up in the process, the NSE Clear Management, on advice from the Risk Management team, will advise the non-defaulting CMs on the top up amounts required and timelines for such top up.

D. Trading Member Default Handling Procedure

1. Where a Trading Member commits an Event of Default as defined in rule 9 of the NSE Derivatives Rules, they are said to be in default. As TMs are clients of CMs, a CM would be the party that typically recognizes the default and thereafter performs the default handling procedures.
2. The CM Management will determine whether there has been an actual default, and if so, issue a Declaration of Default to the Trading Member. If a Declaration of Default is to be issued, then move to step 4.
3. If there is no Declaration of Default to be issued, then the matter is passed on to the CMs Risk and Compliance department to determine how the TM is to be handled going forward, including but not limited to credit lines, margins and collateral.
4. The CM Operations and Risk Management teams then develop the following reports:
 - a. *Client Report*. This will show the total number of Clients that are registered under the defaulting Trading Member. The report should include the client names, their addresses and key contact details. As prescribed in rule 9.5.5.2, the Exchange shall provide the CM with any Client contact details that the Exchange might have that the CM is not privy to.
 - b. *Position Report*. This will show the total number of contracts held by the defaulting TM's clients for each product and expiry date combination. It will also include the TM's aggregate position which is the net of the long and short position of the underlying Clients.
 - c. *Collateral Report*. This will show the sum total of all the collected Initial Margins, Margins and any other collateral collected from the defaulting TM which is accessible to the CM.
 - d. *TM DAS Report*. This will show the unfulfilled obligations of the defaulting TM and its Clients.
5. The CM Management informs the regulator (CMA), the clearing house (NSE Clear) and NSE SRO of their decision to issue the Declaration of Default to the defaulting TM, and the circumstances that precipitated the default.
6. The defaulting TM will be informed in writing that it is in default, with reference made to the relevant NSE Derivatives clause on which the Declaration of Default is being served. At the same time, as prescribed in NSE Derivatives Rule 9.5.2, the defaulting TM will be suspended from trading.
7. The defaulting TM's clients will be informed of the default and informed of the options available to them as outlined in step 8 below.
8. The CM Risk Management team will establish the value and risks of the open positions and collateral held by the defaulting TM. This analysis will enable CM Risk Management to advise on the liquidation strategy. The available liquidation options are:

- a. Porting the positions where possible – this will happen through:
 - i. Assisting Clients to consolidate positions at other non-defaulting TMs where the Clients have existing relationships
 - ii. Assisting Clients to migrate to other TMs of their choice where Clients have preferred TMs that they want to form relationships with.
 - iii. Assisting Clients to sign fresh agreements with selected TMs where the Clients don't have any other existing TM relationships.

It is important to note that the assistance given would only be with regard to administrative assistance in moving the positions. The expeditious negotiation process of fresh agreements will be the responsibility of the Clients.

- b. Auction the positions to one or more TM – for positions that might not garner favourable prices if closed out in the market due to liquidity, complexity or size, appropriate clients will be called up to bid on the positions.
 - c. Liquidate the positions in the market through its appointed TMs, for smaller or less complex positions. This method may be preferable to auctioning. The liquidation will be done through a TM with whom the CM has such liquidation agreements.
 - d. Allow the defaulting TM to continue to execute trades – the defaulting TM can be allowed to continue to fulfil its trade execution obligations if it is determined that they can still comply with their obligations. This arrangement would be reviewed on an on-going basis, under the strict requirements that no more risk increasing trades are taken; or
 - e. A combination of two or more of the above options.
9. Where the defaulting TM has proprietary positions, the NSE Derivatives Rule 9.5.3 will apply; the CM will close out the defaulting TM's proprietary positions by trading to transfer the positions to a TM with whom the CM has a Liquidation Agreement (an agreement with at least one (1) TM of the CM's choice, to which a defaulting TM's proprietary positions may be transferred to for purposes of closing them out) within a timeframe prescribed by the Exchange and at a price approved by the Exchange.
 10. The CM Management will review the CM Risk Management Team's recommendations for liquidation and implement an appropriate strategy. In the event that the liquidation has a Profit/ Loss impact on third parties, the documentation will determine that a fair price has been obtained, given the conditions under which this liquidation occurred.
 11. For the accounts that have been ported, the margins and positions will be reflected under the new TM.
 12. Auctioned and market liquidated positions will be funded through the collateral collected from the Clients.
 13. The CM Management will keep track of all the reasonable costs associated with the closeout broken down at Client level. This Costs Report will be made available to the Exchange and the IPF trustees.
 14. The defaulting TM's clients will have recourse to the IPF for any charges incurred in the liquidation process as prescribed in NSE Derivatives Rule 9.5.6.
 15. A detailed report showing all the steps taken by the CM will be sent to the Exchange.

E. Client Default Handling Procedure

A client shall be considered in default if they commit any of the Events of Default provided in section 9 of the NSE Derivatives Rules.

1. TM's Management shall determine whether there was an actual default, and if so, issue a Declaration of Default to the Client. If a Declaration of Default is to be issued, then move to step 3.
2. If there is no Declaration of Default to be issued, the matter is passed on to the TM's Risk and Compliance to determine how the client will be rated going forward.
3. The TM serves the defaulting Client with a Declaration of Default
4. The TM's Operations team runs the following reports
 - a. Position Report – this is the total number of contracts held by the defaulting Client for each expiry date and product combination.
 - b. Collateral Position – this is the amount of cash and collateral that the TM is holding against the defaulting Client'.
5. The TM's Risk and Trading teams will discuss liquidation strategies. These will include
 - a. Auctioning – this will mean selling off the portfolio of positions to select clients or brokers, in accordance to the TM's internal policies. Costs associated with auctioning the positions will be deducted from the collateral held by the TM.
 - b. Take the positions to their prop books, where possible – this will mean booking close out trades for the Client positions facing the TM prop book. This process will have to be done at a fair price, as prescribed in the TM's internal policies. Costs associated with moving the positions will be deducted from the collateral held by the TM.
 - c. Market Closeout – this will mean going into the market and executing trades that net off the defaulting Client's positions. The expectation will be for an at-best execution in accordance with the TM's internal policies. Reasonable costs associated with moving the positions will be charged against the collateral held by the TM.
6. The TM informs the Exchange and the Regulatory Authority (CMA) of the default and their intention to close out the trades.
7. The TM closes out the trades using the strategy selected from step 5 above.