

JSE CLEAR RECOVERY AND RESOLUTION POLICY

February 2025

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VERSION CONTROL

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VERSION HISTORY

Version	Date	Summary of changes	Author
1.0	Oct 2018	Policy creation	Post-trade Services Risk
2.0	Aug 2019	Cosmetic changes, governance updates	Post-trade Services Risk
3.0	Jan 2020	Reference to section 13 and 19 of FMA Regulations, governance updates	JSE Clear
4.0	May 2021	Cosmetic changes, governance updates, removal of content that is now covered in the Recovery Plan and Resolution Framework e.g. detail relating to recovery scenarios and recovery tools	JSE Clear
5.0	October 2022	Annual review - minor changes	JSE Clear
6.0	February 2024	Annual review – governance review	JSE Clear
7.0	February 2025	Annual review – update of recovery plan scenarios.	JSEC Risk Team

DEFINITIONS

- “Recovery” means the ability of a market infrastructure to recover from a threat to its viability and financial strength so that it can continue to provide its critical functions;
- “Resolution” in this policy describes the state of the organisation where the Resolution Authority steps in to perform the functions of JSEC as a CCP (e.g., where JSE Clear is insolvent). JSE Clear’s business operations are likely to be shut down in an orderly manner.
- “Wind-down” is used to refer to the process of closing the services of the CCP.

1. POLICY CONTEXT

1.1 Introduction

All Financial Market Infrastructures (“**FMI**s”) have to plan for the continuation of their critical business functions in extreme but plausible conditions, to ensure an orderly market with limited disruptions to affected stakeholders. In the most extreme and catastrophic situations an FMI may need to be wound down, and thus the FMI should establish a framework within which this has to be managed in the most effective and orderly manner possible.

In the scenarios of either business “recovery” or ultimate “resolution”, it is important that market participants (especially clearing members) are cognisant of their rights and obligations to ensure that they are aware of the consequences and risks that may eventuate in these extreme market conditions.

JSE Clear (JSEC) is a Central Counterparty (“**CCP**”) and a licensed clearing house. JSEC currently operates as an “independent clearing house” as defined in section 1 of the Financial Markets Act (“**FMA**”) and it clears transactions in securities in accordance with the provisions of the JSE Clear Rules. Having been granted an independent clearing house license, JSEC is operating as an independent clearing house as required by the provisions of the FMA. The rules that record and support this Recovery and Resolution Policy are the rules of JSE Clear.

1.2 Recovery

“Recovery” is used as the collective term for the processes and procedures to share and distribute losses following a catastrophic event to ensure the continued operation of JSEC as a CCP in the derivatives markets.

JSEC acts as a CCP for the JSE’s derivative markets. As a result, the risks faced by JSEC as a CCP, although broadly similar to risks faced by other financial organisations, are unique. JSEC has to specifically consider and define its duties and responsibilities as a CCP, especially in extreme market conditions.

Extreme market conditions may result in large losses suffered by a clearing member, which in turn may result in a default. This policy must also deal with the unlikely situation of a simultaneous default of more than one clearing member. These losses may exceed the collateral and resources held by JSEC.

The risks to which JSEC is exposed are carefully managed through a defined risk management framework established by the JSEC board and includes various risk policies and procedures. Although these measures are robust and effective, JSEC’s policies must also deal with extreme and even catastrophic circumstances and market conditions that may threaten the continued operation of JSEC.

It is of critical importance for the South African financial markets and the entire economy that JSEC remains able to operate as a CCP, even after such a catastrophic event, to ensure the minimum possible disruption to the markets for which JSEC clears. These objectives will only be achieved if JSEC is able to effectively implement measures such that potential losses are shared by clearing participants based on certain pre-agreed rules and/or additional resources that are brought in by JSEC’s owners. These measures and procedures must be transparent

to ensure the stability of the market, to facilitate proper risk management by its stakeholders and to enable clearing members to quantify their potential exposure should the JSE implement these procedures.

1.3 Resolution

Resolution in this policy covers the process whereby JSEC is no longer able to operate as a CCP (for example if it is insolvent) and its business operations are shut down in an orderly manner to ensure that the impact to the market is reduced as much as possible, and that JSEC's exit from the applicable markets is managed as efficiently as possible.

In circumstances more extreme than a declaration of insolvency, where even sharing of losses by clearing participants and/or bringing in additional resources by JSEC's owners is not enough, JSEC may not be able to continue to operate as a CCP and its business and operations will have to be wound down and concluded (resolved) in an orderly manner. The resolution of the business will take place only after all attempts at recovery have been exhausted and/or should the relevant regulatory authorities decide that the winding down of JSEC would be in the best interests of the financial system.

A possible outcome in the event of resolution would be that an entity would be established to take over some of the functions of JSEC, to re-establish clearing services in the derivatives markets. This entity may take over some or all outstanding trades and manage collateral and margin of willing participants. Arrangements may even be made to use the existing infrastructure and skilled workforce of JSEC.

1.4 Regulatory Background

Following the financial crisis of 2006-2008, and subsequent commitment by the G20 to mandate clearing of over-the counter ("OTC") derivatives, international regulators have increasingly focussed on the need for CCPs to transparently address the means by which they would handle an event of such magnitude that its impact exceeds the existing risk protections and threatens the financial viability of the CCP, and therefore the markets it serves.

The regulatory approach advocates the creation of a plan to 'recover' the CCP to permit it to continue its 'critical services' and a plan for 'resolution' which required the orderly winding down of the CCP. For JSEC, the critical service is acting as CCP for the JSE's derivatives markets and fulfilling the duties and functions associated with its role as CCP in the clearing and settlement of those transactions. Since publication of the Principles for Financial Market Infrastructures ("PFMI"s) in April 2012, international regulatory attention has centred on the implementation of CCP recovery plans. Further local and international regulatory work on resolution is expected in the medium term, although there appears to be a growing realisation that resolution is a very complex issue with wide and far-reaching practical consequences. For this reason, the international discussion has until recently been more focused on dealing with the issues related to recovery and is now starting to focus on resolution too.

The Committee on Payments and Market Infrastructures - International Organisation of Securities Commissions' (CPMI-IOSCO) PFMIs from April 2012 refer to recovery processes and especially the need to have in place robust contingency plans for uncovered credit losses. Principle 4, key consideration 7 states that:

“A Financial Market Infrastructure (FMI) should establish explicit rules and procedures that address fully any credit losses it may face as a result of any individual or combined default among its participants with respect to any of their obligations to the FMI. These rules and procedures should address how potentially uncovered credit losses would be allocated, including the repayment of any funds an FMI may borrow from liquidity providers. These rules and procedures should also indicate the FMI’s process to replenish any financial resources that the FMI may employ during a stress event, so that the FMI can continue to operate in a safe and sound manner.”

Further to the above, best practice and international regulatory expectations for CCP recovery and resolution are outlined in the October 2014 CPMI-IOSCO paper entitled “Recovery of Financial Market Infrastructures”. The paper provides guidance on the development of CCP recovery plans and outlines common tools that may be used to achieve the recovery objectives together with their advantages and disadvantages. The Financial Stability Board (“FSB”) supplemented the CPMI-IOSCO guidance with their consultative document from February 2017, entitled “Guidance on Central Counterparty Resolution and Resolution Planning”. In January the FSB published its work programme for 2021 and will, in cooperation with CPMI-IOSCO, consider the need for, and develop as appropriate, international policy on financial resources in recovery and resolution to further strengthen the resilience and resolvability of CCPs.

Domestically, the FMA imposes an obligation on FMIs to implement arrangements to efficiently and effectively manage the material risks associated with the operation and functions of an FMI.

Section 13 of the FMA Regulations require that a CCP’s Risk Management Framework “provide for appropriate plans for its recovery or orderly winding-up and contain, among other elements, a substantive summary of the key recovery or orderly wind-up strategies, the identification of the central counterparty’s critical operations and functions, and a description of the measures needed to implement the key strategies”

In addition to the above, section 19 of the FMA Regulations details the business continuity requirements for CCPs and focuses specifically on what should be encompassed in a CCPs disaster recovery plan.

1.5 Policy Document

This policy document draws upon the above mentioned international CCP standards, the JSE Clear Rules (the Rules) and the (direct or indirect) stipulations regarding recovery and resolution from South African legislation and regulation.

Recovery and resolution are procedures aimed at dealing with catastrophic events that will endanger the entire financial system of South Africa. This would be the most disastrous and extreme events that a CCP could potentially face and generally will only follow a failure of one or more systemically important financial institutions. The policy is therefore closely related to several other JSEC policy documents. In some cases, the processes overlap, for instance, key elements of the Default Management Policy document are critical to the recovery process.

The Recovery and Resolution Policy is closely linked to and should be read in conjunction with the Recovery Plan and Resolution Framework, Enterprise Risk Management Framework, Business Continuity Policy, Default Management Policy, Counterparty Credit Risk Monitoring Policy, Liquidity Policy, Capital Management Policy and Default Fund Policy.

2. POLICY SCOPE

This document outlines the roles and responsibilities regarding the ownership, review and approval of this policy, the responsible authority to determine when to enter into a recovery and resolution process and the authority regarding the order and use of recovery tools. It also describes the types of recovery events and their associated stress scenarios and the resolution framework, which is detailed in the Recovery Plan and Resolution Framework document.

The range of events covered by the Recovery Plan is reviewed periodically to assess their ongoing appropriateness and any need for a broader response within the risk management framework.

The scope in respect of resolution comprises of those *ex-ante* arrangements in place to ensure an orderly winding down of JSEC's activities. In practice, this is expected to be undertaken by Resolution Authority, although it is likely to rely on JSEC operating staff and existing processes to ensure the wind down is orderly.

3. ROLES AND RESPONSIBILITIES

3.1 Policy governance

The JSEC Board is ultimately responsible for recovery of the JSEC business in the event of a threat and for execution of fair and transparent resolution and wind-down processes in the event of failure of the CCP. The JSEC Board has delegated to the JSE Clear Risk Committee responsibility for the establishment of:

- Processes to manage recovery events and their associated stress scenarios,
- Triggers for the implementation of the recovery events; and
- The resolution plan and tools for managing a recovery event.

The JSEC Risk Committee will recommend the initial approval of this policy by the JSEC Board or when there are material changes. The regular annual review of this policy will be approved by the JSE Clear Risk Committee.

It is important that the review ensures that the scope of the main recovery events remains appropriate, and the response is in line with the organisation's risk appetite. The annual review should, as a minimum:

- Review and ensure that the identification of critical services remains accurate;
- Review and adjust the types of recovery events;
- Review the scenarios which would cause each recovery event and assess the need for any additional action in the clearing risk framework to further reduce the probability or mitigate the impact of the scenario;
- Set and review the triggers for the implementation of the recovery plan and/or resolution process; and
- Identify any structural weakness that underlies the recovery event that could potentially require the need to be addressed, for example, a need to re-structure the provision of services between JSE subsidiaries.

The Chief Executive Officer (CEO) of JSEC together with the JSEC Management are responsible for the implementation of this policy. The Chief Compliance Officer will assess this policy for compliance with local and

applicable international rules every 3 years and ensure that any processes that support the implementation of the policy are audited by JSEC internal audit every three years.

3.2 Roles and responsibilities in a recovery event

JSEC is a licensed clearing house and an independent legal entity, and while other companies may have an interest in the financial well-being and operation of JSEC, it is JSEC itself who is solely responsible for taking action for its management, especially in any situation requiring recovery of its operations.

The JSEC Risk Committee will provide recommendations and advice to JSEC's CEO on entry into the recovery process for JSEC. After consideration of all the facts, the JSEC Risk Committee and the CEO will make a proposal with regards to recovery to the JSEC Board. The ultimate decision to trigger a recovery event resides with the JSEC Board.

The decision on the order, use and execution of the recovery tools is to be determined by the CEO of JSEC and this will be done with due consideration for all stakeholders and of the advice of the JSEC Risk Committee and JSEC Board.

In practice, clearing member default related recovery events will be overseen by the Default Management Group Committee ("DMGC"), a JSEC internal group chaired by the JSEC CEO. The JSEC CEO reports to the JSEC Board who have oversight of, and must approve, the default process. The DMGC have the responsibility for external communications to key stakeholders including the regulatory authorities and clearing members. The DMGC is the focal point for key decisions that will be made throughout the default period.

Should the recovery event not involve the DMGC, it is the responsibility of the CEO of JSEC to communicate to the market in a timeous and responsible manner. When the CCP is in resolution, the Resolution Authority will have the responsibility to communicate with and share all relevant information with the FSCA, the Prudential Authority (PA) and the market to ensure that all parties are fully apprised of the status of the resolution procedures.

4. RECOVERY AND RESOLUTION PRINCIPLES AND OBJECTIVES

4.1 Recovery

The overriding objective is that the recovery plan allows JSEC to continue to provide its critical services even when its viability as a going concern is threatened. The priority of more detailed objectives should be aligned to the objectives of managing events leading up to resolution e.g. default management. In order to achieve this, the recovery plan and associated rulebook provisions must be:

- **Comprehensive** - all critical services must be identified, stress scenarios that threaten JSEC's ability to provide those services should be recognised and triggers must be put in place for the implementation of the recovery plan.
- **Effective** - being timely, reliable and with a strong legal basis.

- **Transparent** - to all market users, especially those that could bear losses or liquidity shortfalls, in order to measure, manage and control their potential exposure to the CCP.
- **Provide incentives** - for JSEC and market users to manage and control risk, monitor JSEC's and market users' risk-taking and risk management activities; and assist JSEC in the default management process.
- **Flexible** - in recognition that no ex-ante recovery plan can foresee all potential recovery events; the plan must be sufficiently flexible to permit JSE to use discretion in response to the specific circumstances of the actual recovery (noting that the discretion would be subject to external oversight and require transparent rationale being provided to the wider market).
- **Legally enforceable** - taking into account any constraints potentially imposed by domestic or foreign laws or regulations.
- **Able and designed to contain the impact** - to minimise the negative impact on market users and the wider financial system, as far as reasonably possible.
- **Regularly reviewed** - to ensure that the scope, recovery events, stress scenarios, triggers and tools remain appropriate.

It is likely that there will be situations where not all of the above objectives can be met simultaneously. In such circumstances, it is the obligation of JSEC's CEO to determine the appropriate actions that have to be implemented. This will be done with due regard and careful consideration of all the relevant facts and information which includes the gathering of information and views from all stakeholders.

In the event of entry into a recovery process, the regulators (specifically the Prudential Authority and the Financial Sector Conduct Authority) and the Resolution Authority will be informed immediately and will be updated throughout the process. JSEC is obliged by virtue of the provisions of the FSRA and the FMA to keep these regulatory authorities fully informed during this process to enable the regulators to consider and determine any steps and/or decisions that they may wish to take. The JSEC Board will be similarly informed and will also be notified of any progress during the recovery procedures.

4.2 Resolution

Resolution should only be used when all attempts at recovery have failed (or are likely to fail). It is likely that the decision to enter into resolution will be taken by the regulators and executed by the Resolution Authority.

In respect of resolution arrangements, the broad objective is to secure an orderly wind down of JSEC's clearing activities. To develop the plan for such an extreme outcome, the same broad objectives should also apply as outlined above for the recovery plan. In practice, due to the magnitude of the event that has caused the need to enter resolution and the probable widespread market disruption that could follow, regulators, the JSE, JSEC and market users are likely to convene to determine a bespoke solution that will influence the wind down process. This may involve the creation of an alternative clearing house or the creation of bilaterally cleared OTC contracts for open centrally cleared positions.

If required by the regulators, the Resolution Authority will wind down the CCP in a way that it sees fit depending on the nature of the circumstances leading to the resolution decision and the market circumstances at the time. In all likelihood, another institution will be introduced to take over the clearing of new transactions. Existing positions cleared by JSEC may be transferred to that CCP or the existing positions may be left to run until they

expire. It is anticipated that the manner in which the existing positions will be maintained will be as in a recovery situation where only a portion of the CCP is being closed.

5. RISKS FACED BY JSE CLEAR

The risks faced by JSEC are detailed in JSEC's Enterprise Risk Management Framework. These risks can be classified as either cleared risks or non-cleared risks. Cleared risks include counterparty credit risk and risks pertaining to realising collateral on the default of a counterparty. Non-cleared risks include operational risk, cyber risk, liquidity risk, and reputational risk.

6. CRITICAL FUNCTIONS

According to CPMI IOSCO, recovery concerns the ability of an FMI to recover from a threat to its viability and financial strength and to continue to provide critical services without requiring the use of resolution powers by the authorities. It is important to identify prior to recovery what the critical functions are for JSEC. Knowing this provides guidance for decisions to be made during the recovery process.

JSEC's critical functions are fulfilled by the adoption and enforcement of appropriate rules as required by the Financial Markets Act and are identified in Appendix 1 of the JSE Clear Recovery Plan and Resolution Framework.

7. STRESS SCENARIOS

JSEC has identified scenarios which could threaten JSEC's ability to continue to offer the services it has identified as being critical. JSEC has in place lines of defence to mitigate against the risk of the realisation of these scenarios, nevertheless any FMI must plan for the failure or the insufficiency of the FMI's lines of defence.

Section 6 of the JSEC Recovery Plan and Resolution Framework details the scenarios identified below and outlines the standard mitigants, early warning indicators, indicators (triggers) for initiating the recovery plan and recovery plan actions for each scenario.

1. Default event causing financial losses that propagate through the CCP's default waterfall with return to a matched book through mandatory, rules-based arrangements;
2. Default and/or non-default event causing a liquidity shortfall;
3. Non-default event preventing JSE Clear from performing its critical functions;
4. Non-default event causing financial losses; and
5. Event/(s) causing simultaneous default and non-default losses.

Triggers are set for the identified scenarios for a number of reasons; these provide certainty to JSEC's clearing members and other market participants, to ensure that the CCP maintains credibility and is able to continue to provide its critical services under stressed circumstances. It is important that triggers are set to ensure that the CCP does not use its recovery tools too late and inadvertently threaten its own viability.

The triggers to each recovery scenario are detailed in each scenario in the Recovery Plan.

8. POTENTIAL DISRUPTORS TO JSEC'S RECOVERY PLAN

JSEC has identified factors that may impede its ability effectively discharge its recovery plan. These relate to market conditions at the time of recovery, the health of other interdependent financial institutions and the willingness of regulators and market participants to continue to support the market infrastructure.

The disruptors identified are detailed in Section 7 of the JSE Clear Recovery Plan and Resolution Framework.

9. RESOLUTION

Resolution is triggered by and at the discretion of JSEC's regulators. Triggering resolution will be interpreted as a failure of JSEC which could delay a return to market stability. Triggering resolution prematurely will heighten stress in a market that would at that time already be under pressure. Resolution should only be triggered once all recovery measures are exhausted. Entry into resolution should be dependent on the stress scenario threatening the viability of JSEC and the circumstances of JSEC at that time, as well as JSEC's handling of the situation.

The Resolution Authorities however have the ability to intervene during the recovery process and put JSEC into resolution if it feels that such actions are necessary and in the best interests of the broader market.

In some extreme instances, it may not be desirable or possible for JSEC to continue operating its clearing service. The decision to discontinue clearing services would be taken by the JSEC Board. It is difficult to forecast the criteria for resolution in great detail; however it is most likely to be prompted by all or a combination of most of the following circumstances:

- If JSE Clear instituted recovery measures, but the recovery plan failed to return JSE Clear to viability;
- If the stress scenario itself has resulted in non-viable derivatives market in South Africa. For example, if multiple large South African banks default;
- If the Resolution Authority determines that, even though the plan may not yet have been fully implemented or exhausted, recovery measures will not be sufficient to return JSE Clear to viability or will otherwise compromise financial stability.

Given the importance and impact on the wider market of a move into resolution, it will require significant consultation with market stakeholders, especially regulators, members and market participants. In particular, alternative arrangements for the clearing of the market, perhaps temporarily, may need to be established, for example the creation of a new clearing house or the transfer of positions to another clearing house.

Existing positions may be either closed on JSEC and opened on alternative clearing venue or continue to be cleared until the expiry thereof. No new contracts will be made available for clearing including new expiries or new option strikes on existing underlying instruments.

Clearing members will only be able to resign as and when all the positions they clear have been moved or expired. Their default fund contribution will be returned once they have resigned and all their obligations, including outstanding fees, have been satisfied.

10. SELECTED RESOURCES

- JSE Derivative Rules:
<https://www.jse.co.za/content/JSERulesPoliciesandRegulationItems/DerivativesRules.pdf>
- Interest Rate and Currency Derivatives Rules:
<https://www.jse.co.za/content/JSERulesPoliciesandRegulationItems/Interest%20Rate%20and%20Currency%20Derivatives%20Rules.pdf>
- JSE Clear Rules:
- https://www.jse.co.za/sites/default/files/media/documents/jse-clear/208%20-%20JSEClearRules17052021%20-%20FINAL_SecCol%20Removed.pdf Recovery of Financial Market Infrastructures - Revised Report – 5 July 2017
<https://www.bis.org/cpmi/publ/d162.pdf>
- Principles for Financial market Infrastructures
https://www.bis.org/cpmi/info_pfmi.htm
- Financial Market Act of 2012
https://discover.sabinet.co.za/webx/access/netlaw/19_2012_financial_markets_act.htm
- Financial Market Act Regulations
http://www.treasury.gov.za/otc/41433_9-2_NationalRegulation_DS.pdf
- Draft Joint Standard - Minimum requirements for recovery plans of Market Infrastructures
<https://www.resbank.co.za/en/home/publications/publication-detail-pages/prudential-authority/pa-public-awareness/Communication/2024/Joint-Communication-4-of-2024-Draft-Joint-Standard-Minimum-requirements-for-recovery-plans-of-Market-Infrastructures-for-consultation>
- ESMA Guidelines on CCP recovery plan scenarios (Article 9(12) of CCPRRR)
https://www.esma.europa.eu/sites/default/files/2023-03/Guidelines_on_Recovery_Plan_Scenarios_Article_9%2812%29_CCPRRR.pdf

APPENDIX A – JSE CLEAR RISK COMMITTEE AND BOARD ACTIONS

No.	Ref	Action Item	Frequency	Applicable Governance Forum
1.	3.1	The JSEC Risk Committee will recommend the initial approval of the Recovery and Resolution Policy by the JSEC Board or when there are material changes.	Not specified	<ul style="list-style-type: none"> • JSE Clear Risk Committee
2.	3.1	The regular annual review of the Recovery and Resolution Policy will be approved by the JSE Clear Risk Committee.	Annual	<ul style="list-style-type: none"> • JSE Clear Risk Committee
3.	3.2	The JSEC Risk Committee will provide recommendations and advice to JSEC's CEO on entry into the recovery process for JSEC.	Not specified	<ul style="list-style-type: none"> • JSE Clear Risk Committee
4.	3.2	After consideration of all the facts of a recovery process, the JSEC Risk Committee and the CEO will make a proposal with regards to recovery to the JSEC Board.	Not specified	<ul style="list-style-type: none"> • JSE Clear Risk Committee • JSE Clear CEO
5.	3.2	The ultimate decision to trigger a recovery event resides with the JSEC Board.	Not specified	<ul style="list-style-type: none"> • JSE Clear Board
6.	3.2	The decision on the order, use and execution of the recovery tools is to be determined by the CEO of JSEC and this will be done with due consideration for all stakeholders and of the advice of the JSEC Risk Committee and JSEC Board.	Not specified	<ul style="list-style-type: none"> • JSE Clear CEO • JSE Clear Risk Committee • JSE Clear Board
7.	3.2	The JSEC CEO reports to the JSEC Board who have oversight of, and must approve, the default process.	Not specified	<ul style="list-style-type: none"> • JSE Clear Board