Memorandum - Annexure C

Date:- 11 July 2022

Subject: - Approved amendments to the JSE Equities Rules and Directives - Section 6

of the Rules (JSE Equities Trading System), Directive BT 7 (Trade

Cancellations) and Directive BT 8 (Contra Trade Requests)

Dear Equity Members

Please find attached in Annexure A the approved changes to Rule 6.10 on the use of the JSE equities trading system, Rule 6.50 on trade cancellations and contra trades, and Rule 6.60 on the voiding or cancelling of transactions on the exchanges own volition. These changes and additions are intended to -

- 1. enhance the existing framework in the rules for defining, preventing and dealing with the submission of erroneous orders and error trades;
- specify those factors that the Director: Market Regulation may take into
 consideration when deciding how to treat an alleged error, particularly in
 circumstances where the impact of such a decision (i.e. to cancel or allow trades to
 stand) may have a significant market impact (e.g. errors which occur during a
 closing auction and which may result in the cancellation of the entire auction);
- 3. provide specific details on the types of factors the Director: Market Regulation will give consideration to in assessing whether an order was clearly entered in error;
- 4. replace the existing blanket 5% no cancellation range with a specific no cancellation range percentage which is more aligned (i.e. by market segment) to the liquidity and therefore price volatility of each security;
- 5. impose an obligation on members to have appropriate systems, procedures and controls to prevent the submission of erroneous orders to the JSE equities trading system, and orders which have, or which are likely to have, the effect of taking advantage of significant errors that could be made by other market participants or that could manipulate the outcome of auction algorithms;
- 6. compliment trading system changes that the JSE has made over time (e.g. adjusting the dynamic and static closing auction circuit breakers as well as the randomised closing auction uncrossing periods) to reduce the potential for errors in the closing auction, and enhance and promote the price formation process;
- provide a framework for the JSE to facilitate voluntary error trade contras, with specific qualifying criteria, in circumstances where an error trade fails to meet the more stringent criteria for an exchange enforced error trade cancellation.

Implementation of systems, procedures and controls to prevent error trades and certain harmful market practices

The amendments to the rules and directives mainly deal with the manner in which error trades and certain other problematic trades are dealt with after the fact. But it is important for members to implement adequate safeguards to prevent these types of trades from occurring in the first place.

Directive BT 10 requires members who utilise client DMA applications to ensure that these applications prevent orders being submitted to the JSE trading system that could result in error trades. But we felt that it was necessary to introduce a broader requirement for members to introduce appropriate systems, procedures and controls to prevent error trades in all circumstances and not only when utilising client DMA applications. The need to avoid the submission of orders that could result in error trades is equally applicable, for example, in relation to the use of proprietary trading applications and the manual input of orders into the trading system by traders. The requirement in this regard has been introduced in new rule 6.10.12.

This new requirement has also been extended to the implementation of systems, procedures and controls to prevent the submission of unreasonably low bids or high offers, discussed further below.

(Refer to new rule 6.10.12)

<u>Trade errors and unreasonable uncrossing prices during the opening, intra-day and closing auction call sessions</u>

As part of the changes to the trade cancellation rules, the JSE has considered whether the existing rules on error trades adequately address the challenges associated with order input errors and error trades that may occur during an auction call session.

The closing auction process in particular has come under close scrutiny because of the high volumes in these auctions, as well as the fact that the events occurring at a market close, by their nature, have a much higher impact on market participants. Order input errors or omissions which happen during continuous trading are typically able to be corrected in the market on the same day, whereas if these occur at the market close, participants may be caught with unwanted or erroneous trades or unfilled positions overnight (i.e. after the closing auction a participant will be unable to re-transact in the event that the closing auction uncrossing has been cancelled).

The current trading system functionality for auctions incorporates "price" and "market order" extensions, as well as both dynamic and static circuit breakers and indicative uncrossing price disclosure. These features provide members and clients with a reasonable opportunity to check and monitor the impact of their orders, and to avoid errors during the auction call periods as much as possible.

Our observation of the trade cancellation rules on other recognised exchanges indicates that the international norm is not to differentiate between, or provide a different set of rules and cancellation criteria for, errors made during continuous trading and errors that may occur during the uncrossing of auctions (i.e. the same cancellation criteria apply irrespective of the specific trading session). Despite the error prevention functionality in the JSE trading system for auctions, it is not inconceivable that an error trade may still occur during the uncrossing of an auction.

Given the nature of the auction algorithm (designed to maximize volume at a single uncrossing price), where an order has been entered in error during an auction call period and an error has occurred in the auction uncrossing, it would be impossible (and illogical) to unwind only those trades which have been matched (per the auction algorithm) with the error maker, as we do in the case of errors that occur during continuous trading.

Therefore, in the event that an auction error trade which qualifies for cancellation occurs on the uncrossing of an auction, the new rule requires the Director: Market Regulation to consider the potential adverse market impact of cancelling the entire auction, and a decision to cancel the auction will only be made if this is in best interests of the market, otherwise the error and all of the auction trades will stand.

Similarly, where an auction has resulted in the significant mispricing of the uncrossing price, due to how the auction algorithm treats market orders and the possible presence of unreasonably low bids or high offers (i.e. predatory orders) in the market at the time of the auction uncrossing, the Director: Market Regulation will consider the potential adverse market impact of cancelling the entire auction and may decide to cancel the auction where this in the best interests of the market, otherwise the auction will stand.

Although we have discussed the impact of erroneous orders on auctions in particular above, members should note that the amendments provide for the Director: Market Regulation to consider the best interests of the market of either cancelling trades or letting trades stand in all instances where there has been an error trade, and not only in auctions. Regardless of whether the specific criteria for the cancellation of a trade, as set out in the rules, have been met, the best interests of the market will always be an overriding consideration in each decision to be made by the Director: Market Regulation. The factors that the Director: Market Regulation may take into account in considering the best interests of the market are set out in the new amendments. It should be noted that one of those factors is the amount of time and effort involved from both the affected members and the JSE in cancelling trades. Experience has shown that particularly where a large number of trades cannot be cancelled on the trade date, it is hugely disruptive and time consuming to all concerned to cancel the trades the following day, and this will be factored into future decisions on whether trades should be cancelled, regardless of whether they meet the specific criteria for cancellation.

(Refer to rules 6.10.12, 6.10.13, 6.50.3 and 6.60.2)

Cancellation range percentages by market segment

The previous rule 6.50.2.2 applied a fixed 5% range from the reference price, across all instruments (irrespective of liquidity or price volatility), within which error trades did not qualify for cancellation. The purpose of this no-cancellation range is twofold. Firstly, it promotes confidence in the market and the important concept of trade certainty by ensuring that all trades within a reasonable range of the reference price stand, irrespective of whether an error has occurred. Secondly, it is used as one of the bases for determining whether there has been a genuine order input error, because the extent to which a price deviates from the reference price is indicative of whether a market participant intended to enter an order into the order book at that price or not.

The new directive BT 7.8 maintains the above purpose of the no-cancellation range but applies a different no-cancellation range to each of the equity market segments (i.e. per the Table in the directives – from 5% for ZA01 to 50% for ZA04). The purpose of the no-cancellation ranges per segment is to ensure a more consistent application of the error trade concept in the rules, by incorporating a measure of liquidity and volatility into the cancellation criteria.

To avoid any uncertainty on the application of the non-cancellation range, we have also indicated that no rounding will be applied in future in calculating whether the price of an error trade is away from the reference price by at least the percentage specified in Directive BT 7.8.

(Refer to rule 6.50.2.3 and directive BT 7.8)

Determining what constitutes a genuine error

An important element of the trade cancellation rule is that alleged error trades may only be eligible for cancellation where the person responsible for the order that gave rise to the error clearly could not have intended to submit the order with its specific terms, at the time of the submission of the order. This concept applies to orders submitted manually by a trader or by a client (via DMA), and to orders generated by a computerised trading application. The new rules cater for the so-called "fat finger" errors or the electronic equivalent thereof. This approach has been adopted in practice by the Market Regulation Division to date, but it was necessary for us to record the principle in the rules for clarification. The approach is consistent with well-established common law principles regarding the binding and enforceable nature of contracts, and the circumstances in which a contract might be cancelled, with due consideration to the fact that trades are occurring in an anonymous central order book, where a party to a trade does not know the identity of their counterparty nor the rationale of their counterparty for entering into the transaction.

In this regard, we have introduced new rule 6.50.2.1 to articulate this requirement, as well as new rule 6.50.4 which provides further guidance on the factors that the Director: Market Regulation will consider when making a determination in terms of this rule, including, but not limited to, the circumstances that caused the erroneous order to be submitted (such as

manual input errors, or member trading application or system malfunctions or disruptions), and the price at which the order was entered relative to the current or recent price for the relevant equity security.

It should be noted that errors in judgement or the failure to take into account, or properly analyse, relevant market information when entering orders, that results in an outcome that the party to the resultant trade is dissatisfied with, in hindsight, will not constitute an error that qualifies for a trade cancellation in terms of the rules. These are not regarded as order entry errors.

Similarly, if a trading application or other system involved in the submission of an order to the order book generates an order at a price based on how it was programmed, and the data inputs into the programme are what was intended to be input, but the party to the resultant trade is dissatisfied, in hindsight, with the outcome, a programming error that resulted in that outcome will not constitute an error that qualifies for a trade cancellation in terms of the rules. However, if there is a clear error in the input of data into a trading application or other system involved in the submission of an order to the order book, and, as a result, the trading application generates a clearly erroneous price, that data input error would be regarded as having caused an order input error, and this type of error would qualify for consideration to be cancelled, subject to the application of all the other cancellation criteria in the rules.

It is important to note that where the price of a trade is away from the reference price by at least the percentage per the table in Directive BT 7.8, this may not, in itself, be sufficient evidence that the person responsible for the order made a clear error in the price or order type (such as a market order) when submitting the order. In considering whether an alleged error of this nature is a clear error, which qualifies in terms of the rules, the Director: Market Regulation may take into account various factors, including, but not limited to, market conditions, the release of news and corporate actions, that may have impacted on the market price of the relevant equity security at, or recently prior to, the time that the order was submitted.

(Refer to rules 6.50.2.1 and 6.50.4)

Quantum of the loss incurred on error trades

The previous rules stated that one of the criteria for error trades to be cancelled was that the loss incurred on the error trades (based on the difference between the traded price and the reference price) had to be at least R50 000. This value had not been amended since the error trade rules were first introduced over 20 years ago.

The loss criterion is an important feature of the approach to dealing with error trades, because the overriding principle should be that executed trades should stand, as the cancellation of trades can be highly disruptive to affected market participants and the market in general. Trades should therefore only be cancelled under exceptional

circumstances. The loss therefore serves as one of the important thresholds to promote certainty of trading and avoid unnecessary market disruption.

It should also be borne in mind that if a trade is cancelled, the innocent party may have to re-transact and, in doing so, they would have lost time priority in the order book. The innocent party may also have executed consequential transactions (either in the cash equities market or the equity derivatives market) and those transactions would not be cancelled. They might re-transact at a worse price than they would have had they not lost time priority, and there may be adverse financial consequences for them in relation to any consequential transactions that do not get cancelled. An exchange-enforced cancellation does not result in any compensation to the innocent party for any adverse consequences that they may suffer, and this provides an additional reason why appropriate thresholds need to be set for trade cancellations, of which the loss incurred by the party that makes the error is one of the most important.

The value of the loss applied by other international exchanges who use the loss as one of their error trade criteria is significantly higher than R50 000. The London Stock Exchange, for example, uses a loss figure of 100 000 GBP. We acknowledge that exchanges such as the London Stock Exchange are substantially larger than the JSE, so the values are not directly comparable, but the point remains that the loss incurred by the market participant who makes the error should serve as an appropriate and material threshold that needs to be met before error trades can be considered for cancellation. The previous loss figure applied by the JSE of R50 000 was significantly lower than the value applied by the JSE's international peers, even when taking relative size into account.

The minimum loss incurred by the party that makes the error has, therefore, been increased to R100 000.

(Refer to amended rule 6.50.2.4)

The submission of unreasonably low bids or high offers, and trades resulting from the matching of such orders

In addition to preventing the submission of erroneous orders into the market, a member's systems, procedures and controls must also prevent the submission of unreasonably low bids or unreasonably high offers (either as resting orders or orders entered into an auction), which appear to have the purpose, or are likely to have the effect, of taking advantage of significant errors that could be made by other market participants in the submission of orders, or significant mispricing of auction trades due to how the auction algorithms match market orders and limit orders.

These unreasonably low bids or high offers can be referred to as "predatory orders", as they are entered with the purpose of "lying in wait" to take advantage of other market participants' unintended errors and unexpected outcomes of an auction algorithm, as and when they happen. The submission of such orders is regarded by the JSE as being a harmful and unethical practice that is not conducive to a fair market, and members should

implement the necessary measures to avoid these types of orders being submitted to the JSE trading system.

In implementing the necessary measures, members will have to use their judgement in determining what constitutes an unreasonably low bid or unreasonably high offer which appears to have the purpose set out in new rule 6.10.12.2. The extent of the deviation of the price of the relevant order from the ruling market price will obviously be the main factor used in making this determination, and members will then have to apply their minds as to what the intention of the party placing the order appears to be. The Market Regulation Division has observed numerous instances over time where it would be obvious to any reasonable person what the intention of the person placing the order is, and that these orders are "predatory" in nature. We would at least expect that the measures implemented by members would identify these blatant "predatory orders" and ensure that they are not submitted to, or remain on, the JSE trading system.

The rule amendments seek to address these "predatory orders" in an appropriate manner. The new rule permits the Director: Market Regulation to request a member to cancel or suspend "predatory orders" if the Market Regulation Division becomes aware of them and deems them to be blatantly predatory, and in the event that an on book trade results from the matching of such orders, the Director: Market Regulation may instruct members to enter a trade cancellation without having received a formal request to do so from any member.

(Refer to rules 6.10.12, 6.10.13 & 6.60.2)

Transactions declared void or cancelled on the JSE's own volition

Section 6.60 has been amended to consolidate and better describe all of the conditions and circumstances that would cause the Market Controller and/or the Director: Market Regulation to declare a transaction void and issue an instruction for a member or members to cancel a trade, irrespective of whether the criteria for cancellation in rule 6.50.2 have been met.

Of particular importance is the provision in section 6.60.3 which empowers the JSE to both declare a trade void and, if necessary, replace a void trade with a new trade, in the event that it is necessary to do so to maintain a fair and orderly market as a result of a systems problem which causes the JSE trading system to generate invalid trades. In the past, the JSE has acted partly in terms of its rules and partly in terms of its general powers in the Financial Markets Act to do all things necessary for the proper operation of its exchange, when a systems problem has resulted in invalid trades that the market participants had no intention of executing, by cancelling the invalid trades and replacing them with other trades. The previous rules provided for the JSE to declare a trade to be void, but they did not make specific provision for these trades to be replaced with other trades. The JSE felt that it was necessary, and appropriate, to make specific provision in the rules for cancelled trades to be replaced with other trades, if the circumstances necessitate this to maintain a fair and orderly market.

(Refer to rules 6.50.3.3 & 6.60)

Introducing formal voluntary contra trade requests

New rules have been introduced to give effect to a voluntary contra trade request process, whereby the member responsible for a genuine error may request the Director: Market Regulation to initiate a voluntary contra trade request, as described in the new directive, in circumstances where a trade does not qualify for an exchange-enforced cancellation in terms of the error trade rules. The intention of the new rule is to formalise the previous informal process facilitated by the Market Regulation Division, whereby a member can seek possible relief (with the concurrence of the counterparty) in the form of a contra trade. Consent by a counterparty to a contra trade request shall be voluntary.

A trade will only be eligible for a voluntary contra request where a genuine error has occurred (i.e. the trade meets the criteria for an error per rule 6.50.5.2) and certain other criteria set out in rule 6.50.5 are met, but where the trade fails to meet some of the stricter criteria which apply for an exchange-enforced error trade cancellation in terms of rule 6.50.2.

The JSE felt that it was important to avoid requests for exchange-enforced trade cancellations that do not meet the criteria in rule 6.50.2 simply all becoming requests for voluntary contra trades, to avoid the disruptive effect to the Market Regulation Division and market participants of potentially having to deal with requests relating to alleged errors that the party who has made the error should take full responsibility for. Therefore, we have still set criteria for voluntary contra trade requests, including that the trade must be the result of a genuine error, there must be a minimum deviation from the reference price as set out in Directive BT 8, and there must be a minimum loss resulting from the alleged error of R100 000. These criteria enable a market participant who has made an error in submitting an order to still potentially obtain some relief through the voluntary contra trade process, in instances where they have, for example, not quite met the price deviation criteria or the 20-minute notification requirement in rule 6.50.2, but they have still incurred a substantial loss.

Given that facilitating a voluntary contra trade request could materially disrupt the regulatory activities of the Market Regulation Division and be disruptive to the affected counterparties (including counterparty member firms who may have to contact affected clients), we have made provision in rule 6.50.6 for the Director: Market Regulation to consider the potential operational impact on both the JSE and the affected counterparties of facilitating a contra trade request before agreeing to do so. This rule will be applied particularly in circumstances where the contra trade request relates to a large number of trades and a large number of affected counterparties. In order to minimize the operational impact on the Market Regulation Division and the affected counterparties in these circumstances, the Market Regulation Division's past practice when facilitating voluntary contra trade requests on an informal basis included, for example, selecting those trades with the highest adverse impact on the party who has made the error, and facilitating a contra trade request only in respect of those trades. Rule 6.50.6 effectively incorporates

the Market Regulation Division's past practice in the rules, and provides the Director: Market Regulation with the ability to apply his judgement in seeking to achieve a balance between attempting to obtain material relief for the error maker and managing the operational impact on the JSE and the affected counterparties.

(Refer to new rule 6.50.5 and new directive BT-8)