



# JOHANNESBURG STOCK EXCHANGE

## Equity Derivatives

### Market Notice

Number: F4621

Date 10 February 2010

### FINANCIAL DERIVATIVE OPTIONS ADVISORY SUB-COMMITTEE FEEDBACK

On request of the Financial Derivative Advisory Committee (FDAC), a Financial Derivative Options Advisory Sub-Committee was formed. The purpose of the committee is to discuss and agree strategic items specifically associated with the Equity Derivative Options market.

The purpose of this market notice is to provide feedback to the rest of the Equity Derivatives market with regards to discussions and outcomes of the first meeting held on 1 February 2010.

If you have any queries, please feel free to contact [derivativetrading@jse.co.za](mailto:derivativetrading@jse.co.za)

Magnus de Wet

Manager: Derivatives Specialist

Tel: +27 11 520 7320

Fax: +27 11 520 8320

E-mail: [magnusd@jse.co.za](mailto:magnusd@jse.co.za)

**Distributed by the Company Secretariat +27 11 520 7478**



**JSE Limited Registration Number: 2005/022939/06**

One Exchange Square, Gwen Lane, Sandown, South Africa.  
Private Bag X991174, Sandton, 2146, South Africa. Telephone:  
+27 11 520 7000, Facsimile: +27 11 520 8584, [www.jse.co.za](http://www.jse.co.za)

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## 1. Financial Derivative Options Advisory Sub-Committee Members:

In order to initiate an Options Advisory Sub-Committee, the JSE selected Committee Members based on their merits and experience in the South African Options market. The list below indicates the invited committee members to the initial meeting held in the JSE's Serengeti Board Room on 1 February 2011 between 07:00 and 09:00 in the morning:

#	Invitee	Company
1	Allan Thomson	JSE
2	Andrew Souter	Investec
3	Andrew van Entwerpen	Standard Bank
4	Brendan Harcourt-Wood	Standard Bank
5	Cian Kennedy	JP Morgan London
6	Cornelius Du Plessis	JP Morgan
7	Craig Fillis	Coronation
8	Crispin Gell	Nedbank
9	Eddie Lenci	Oakleaf Capital
10	Frayne Marupen	Peregrine
11	Glen Copans	RMB Asset Management
12	Grant Shannon	i-Cap
13	James Boardman	JSE
14	John Parent	RMB Morgan Stanley
15	Louisjan Bonthuys	STT
16	Magnus de Wet	JSE
17	Matthew Arnott	Deutsche Bank
18	Nick Luck	Macquarie
19	Nimalin Moodley	Credit Suisse
20	Petrus Bosman	Prescient Securities
21	Retief du Toit	PSG
22	Rithen Ramlal	UBS
23	Rudolf Oosthuizen	JSE
24	Shiran Samuel	CITI
25	Sumesh Chetty	Investec Asset Management
26	Tinus Rautenbach	Investec

Unlike the Financial Advisory Committee, there are still places available on the Options Advisory Sub-Committee. Interested parties should contact the Safex Style Options team.

## 2. Agenda:

Agenda for the first meeting:

1. Welcome & Apologies
2. Adoption of Agenda
3. Publishing Vols on Reported Trades
4. Condensed Strike Intervals
5. Deriving the Mid Price for Delta Options:

For Indices using rolls for further expiries

For the Single Stock using the N-Contracts and rolls for further expiries

6. Structured Options trades and Proposed Electronic Trading Functionality
7. Valuation conference focusing on Single stock options skews – May 2011
8. Educational Seminars at the JSE + Inside Options on Summit TV
9. Any other business – Participants were invited to raise option related topics not on the agenda during this part of the meeting.

### **3. Publishing Vols on Reported Trades**

The JSE proposed that reported trades beneath a certain size would have their traded volatility level published to the Equity Derivative market. Currently no reported trades have their volatilities published post the trade but on-screen trades do have their traded volatility levels published. Due to the large majority of trades still being report only transactions there is currently very little transparency in the South African Equity Options Market. The exchange hopes that by increasing the transparency in this market new participants both local and international can be encouraged to participate in options trading.

It was agreed that the volatilities on trades up to a standard interbank clip size would be disclosed. This level was determined to be:

- Trades up to and including 1000 ALSI options contracts
- Trades up to and including 5000 DTOP options contracts
- Single Stock Option trades up to and including ZAR 55 million of notional exposure (delta 1 equivalent)

Trades above these sizes, due to their ability to move the market and the sensitivity of their traded levels, will not be disclosed.

In the future there is the potential to disclose some of the inter-bank markets trades even up to a fairly substantial size if both counterparties agree to disclose this data. One suggestion was that there could be a box to tick or un-tick allowing for disclosure of the traded levels for larger transactions.

One concern raised was that the volatilities published from these trades would need to be identified as a structure in order not to mislead participants over the outright vols. To prevent this the JSE will attempt to identify structures and group them together in the data. Attendees also suggested using a shared reference code for the deals to show that they are a structure.

Software changes are required to the Nutron trading System in order to display the vols automatically on the Nutron Options Stats window and via the API. As an interim solution the JSE will be publishing the agreed vols on an MS Excel report on the JSE's website at the following URL:

<http://www.jse.co.za/DownloadFiles.aspx?RequestedNode=DownloadableDocuments/Safex/mtmdata/Daily%20Traded%20Options%20and%20Volatilities>

Manual Steps:

[www.safex.co.za/pub](http://www.safex.co.za/pub)

MtMData

Daily Traded Options and Volatilities

**Implementation: 14 February 2011**

#### **4. Condensed Strike Intervals**

Currently the strike price intervals on Safex Style Options are dated. The ALSI is still on 50 point intervals from the days when the index was at the 5,000 level. In order to ensure liquidity when trading on-screen, the JSE needs to condense the strike intervals. After much deliberation a principle was agreed upon that the on-screen market and the off-screen market could have different strike intervals. The following was agreed: The ALSI will have an on-screen strike interval of 250 points and the DTOP will have an on-screen strike interval of 50 points. The off-screen strike intervals will remain 50 points for the ALSI and 10 points for the DTOP. For Single Stock Options (SSO) due to the large number of structured transactions and the relatively low current liquidity in these options it was agreed to keep the current strike interval of 1 cent for both on-screen and off-screen.

**Implementation: 22 March 2011**

#### **5. Deriving the Mid Price for Delta Options**

As a result of the off-screen rules, more and more participants are trading options on-screen. Most of the trade is however in Delta Options which insures the initial delta hedge (futures leg) for the option writers. If a trader therefore buys 10 Delta At-the-Money Calls he will be short 5 futures contracts. The price and quantity of these futures is currently determined by using the following algorithm:

- The middle of the double of the SSF Q-Contract
  - If the above is not present, then use
- The last traded on-screen price of the SSF Q-Contract
  - If the above is not present, then use
- The previous day's Mark-to-Market (MtM) price

Due to the lack of on-screen liquidity in the Single Stock Future (SSF) Q-Contracts and further dated Index Future contracts, Nutron occasionally gives stale futures reference prices for on-screen delta option trades, when applying the current (above) algorithm.

Currently liquidity providers are quoting on-screen on the Dividend Neutral (N-Contracts) and not on the normal Q-Contract. The N-Contract trades at spot price plus carry cost only. It was agreed that by using the on-screen N-Contracts less the JSE's assumed/declared dividend, a more accurate implied forward could be derived as the Futures Delta price for near dated SSFs.

For further dated SSFs and Indices, it was also agreed that the system could add a spread/roll (derived from the previous nights MtM) to the middle of the double of the near on-screen contract in order to derive a more accurate futures reference price for further dated instruments.

**Implementation: June 2011 Nutron Software Release**

#### **6. Structured Options trades and Proposed Electronic Trading Functionality**

The minimum off-screen trade rules are making it difficult for participants trading structures like fences or straddles where two or more legs trade together and one or more of these legs are beneath the minimum

size. As a result the JSE proposed electronic functionality that will enable Options structures to be traded as a single indivisible new virtual contract. This functionality will provide the ability to trade a structure contingent upon all legs being filled in the correct size on screen and anonymously. All market participants, including the outright options central order book, will be able to bid or offer on this structure as a whole. Potential trading screens and the central order book (with time, price priority) that could be used was demonstrated with reference to the following proposed screens.

Nutron Option Strategy Trading Screen

Strategy Name: Fence

Contract: AGLQ

MAR11 Futures Price: 367.28

JUN11 Futures Price:

SEP11 Futures Price:

Expiry	Buy/Sell	Quantity	Call/Put/Delta	Strike	Vol	Premium	Leg Premium	Offer 1	Offer 2
MAR11	Buy	150	Put	350.00	30.11	974.96	146,244.00		
MAR11	Sell	150	Put	320.00	33.19	339.59	50,938.50		
MAR11	Sell	150	Call	395.00	26.69	582.99	87,448.50		
*									

Submit Accept Cancel Total NP: 7,857.00

**Figure 1: Entering an Option Structure**

Strategy	Bid Net Prem	Offer Net Prem	Time Req
Fence ALSI: B 150 MAR11 P 350 / S 150 MAR11 P 320 / S 150 MAR11 C 395	7,857.00	8,000.00	11:15:23
Straddle AGLQ: B 100 MAR11 P 95 / B 100 MAR11 C 95	975.00	1,125.00	13:05:16
Strangle MTNQ : B 100 MAR11 P 80 / B 100 MAR11 C 110	1,265.00	1,300.00	14:00:19

**Figure 2: Option Structures Central Order Book**

Market participants agreed that this was an interesting approach that should be implemented as this will enable structured trades with one or more legs smaller than the allowable minimum off-screen rule to be traded.

Large trades will continue to be phone brokered and reported onto the market. For smaller trades having a liquid and transparent strategies market could prove very helpful in growing liquidity and encouraging new participants in our market.

**Business requirements are currently being documented. Implementation: Q4 2011 to Q1 2012.**

#### **7. Valuation conference focusing on Single stock options skews**

The JSE will be involved in organizing a breakfast conference to take place in May 2011 on Single Stock Options Volatility Valuations. The likely attendees will include risk managers, traders, fund managers and auditors. The JSE will communicate to the Options market as details of the conference are confirmed.

#### **8. Educational Seminars at the JSE + Inside Options on Summit TV**

The JSE's Equity Derivatives team recognizes the importance of education in growing the SA derivatives market and will be hosting several free educational seminars in the JSE's auditorium throughout the year to educate potential users of derivative products. The dates specific of interest to Equity Derivative Options are listed below:

- 21 June 2011 – Introduction to Safex Style Options
- 19 July 2011 – Safex Style Options in Depth

Market participants will be requested to invite their clients to these educational seminars. Other dates and topics will be made available on the JSE's website in due course.

The JSE has committed to sponsoring a program to be shown on Summit TV called "Inside Options". This will be a weekly fifteen minute television programme segment which will seek to demystify trading Options for SA's investing public, Summit's regular viewers, retail investors and traders. It will be broadcasted weekly for 16 weeks from March 2011 until June 2011.

#### **9. Any other business**

Any other business included a lengthy discussion on Can-Do Options and perhaps adopting slightly simpler naming conventions for some of the simpler Index linked instruments for ease of use. It was also mentioned that the level of complexity needs to be considered in the exchanges trading fees for Can-Do options as well.

A request was made for standardised monthly option expiries. In the past the JSE has been steering away from monthly expiries in order to not split liquidity. The accurate creation of skews and MtM processes for monthly expiries was also identified as potential hurdles in past investigations.

A further proposal was made suggesting that the JSE's Equity Derivatives market look at changing its ALSI skew for MtM purposes from a Sticky Delta to a Sticky Strike model as this is closer to current market practice. The JSE and STT confirmed that systems development that could enable this change to occur technically is currently underway but comprehensive research still needs to be finalised. It was also requested the JSE polls the option market in order to determine the most used model; suggesting the JSE should implement the same.

The exchange is taking all the above points into consideration and will attempt to find workable solutions.

As per the Financial Derivative Advisory Committee meetings, it was agreed the Financial Derivative Options Advisory Sub-Committee meetings will also be held quarterly.