JSE @ Your Service

Order Types, Order Attributes and Order Management

26 February 2026

let's connect

MEET THE **TEAM**

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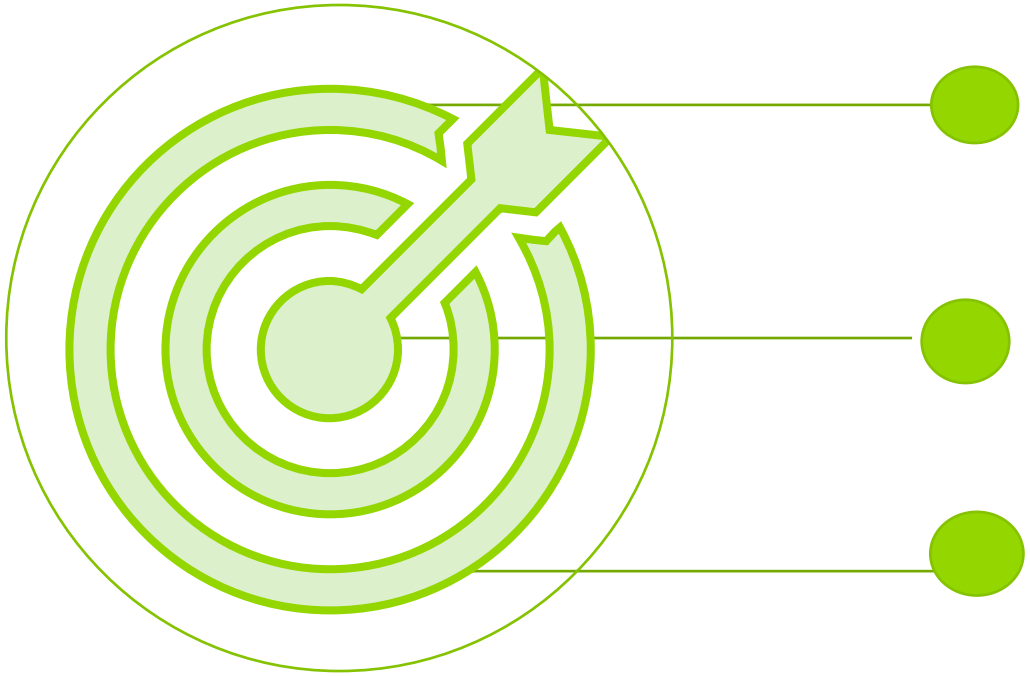
As Trading Operations, we are committed to making a meaningful impact in the financial markets by:

- Ensuring fairness, transparency and integrity across all markets
- Driving innovation and fostering growth through education and engagements

Our core responsibilities include:

- Managing day to day trading and market operations across all asset classes
- Overseeing new product releases from concept to production, including design, testing, delivery and handover for ongoing support
- Providing second level support to address client queries and issues
- **Client Service Centre (CSC)** serves as our **first-level support** and can be contacted on 011 520 7777 or customersupport@jse.co.za

Objectives



Create a collaborative space for all market participants.

Bridge the gap between traders, their frontends and functionality

Educate the market on standard JSE functionality

Address trader pain-points and align on basic market operations.

Enhance fairness and transparency across all members

Encourage co-creation, approachability and stronger relationships

Foster more frequent **face-to-face engagement** with each member

Vision for JSE @ Your Service

Empowering our clients through education, collaboration, and tailored support to unlock the full potential of JSE's trading ecosystem.

Educate & Empower

- Build foundational understanding of trading functionality and operational workflows
- Simplify complex concepts, address common queries, and demystify trading processes
- **Intended Audience:** Head of trading desks, traders and immediate teams, new members across EQM, EDM,& FXM, members of the trading desks and back office teams

Monthly Virtual session (60 minutes)

- **Themed educational walkthroughs** of trading functionalities
- Discuss evolving market practises
- Create a consistent learning rhythm and foster collaboration
- **Resources shared**: After each session, clients receive:
  - Recording for reference
  - The Presentation deck (PDF Format)
  - Quick links to relevant documentation
  - Summary of key takeaways

Tailored in-person visits (On request)

- Deep-dive into **client specific needs and workflows**
- Strengthen relationships and provide hands-on support
- Open discussions, brainstorming , knowledge sharing and problem solving.
- Flexible to present in meeting rooms or join traders at their desks for minimal impact to operations.
- Discuss updates on projects, new functionality and enhancements.

Building Together

- **Client input matters** : We want to hear what topics matters most to you
- Post-session surveys to assess usefulness, relevance and impact
- Use feedback to shape future sessions, formats and content
- A shared roadmap for continuous improvement and innovation
- Potential for a year-end in-person session based on engagement.

2026 Monthly Training Plan

Month	Theme	Expected Outcomes
29 January 2026 (completed)	*The Daily Trading Lifecycle and JSE Trading model*	*Introduce the initiative, set expectations, and members gain understanding of the full day structure, including key sessions and how the JSE trading model supports price discovery and execution*
26 February 2026	**Type of Orders, Order Attributes & Order Management**	**Improve order handling accuracy, reduce rejections and optimize execution strategies using the correct order types and qualifiers**
26 March 2026	Auction sessions, Matching Algorithm & Priority Rules	Understand auction logic, optimize participation and reduce execution risk, including FCO's
30 April 2026	Closing Price Methodology	Members understand how closing prices are calculated , the role of the closing auction, and how it impacts valuations and settlement
28 May 2026	Instrument, structured products and user created instruments	Members understand the instrument types available in all three markets and the creation of user created instruments, including bespoke structured products.
25 June 2026	Circuit breakers and Price bands , order rates, cancel on disconnect , IOC examples	Members understand safe trading practices and how circuit breakers and price bands protect market integrity active monitoring of volatility auctions, duration and manual intervention for market quality
30 July 2026	Trade types: On-book and Reported including Trade Cancellations	Members understand single and dual trade reporting, trade cancellation and modification, including next day cancellations
27 August 2026	Exchange Traded Products & Market making	Improved trading strategies and product utilization
30 September 2026	Market data Dissemination and Technical gateways, including SENS and Indices	Members understand the structure and flow of JSE market data, how to access it, and how to use it effectively in trading decisions.
29 October 2026	Corporate actions	Detailed workflow of corporate actions, how they are captured in the trading engine and information made available via market data gateways.
26 November 2026	Year –End Wrap up & vision for the following year including Market Trends & Insights	Share key market developments, trading volumes, and behavioral insights. Celebrate progress and member contribution, build excitement for the next phase of engagement

Recap from Previous Session

Daily Trading Lifecycle

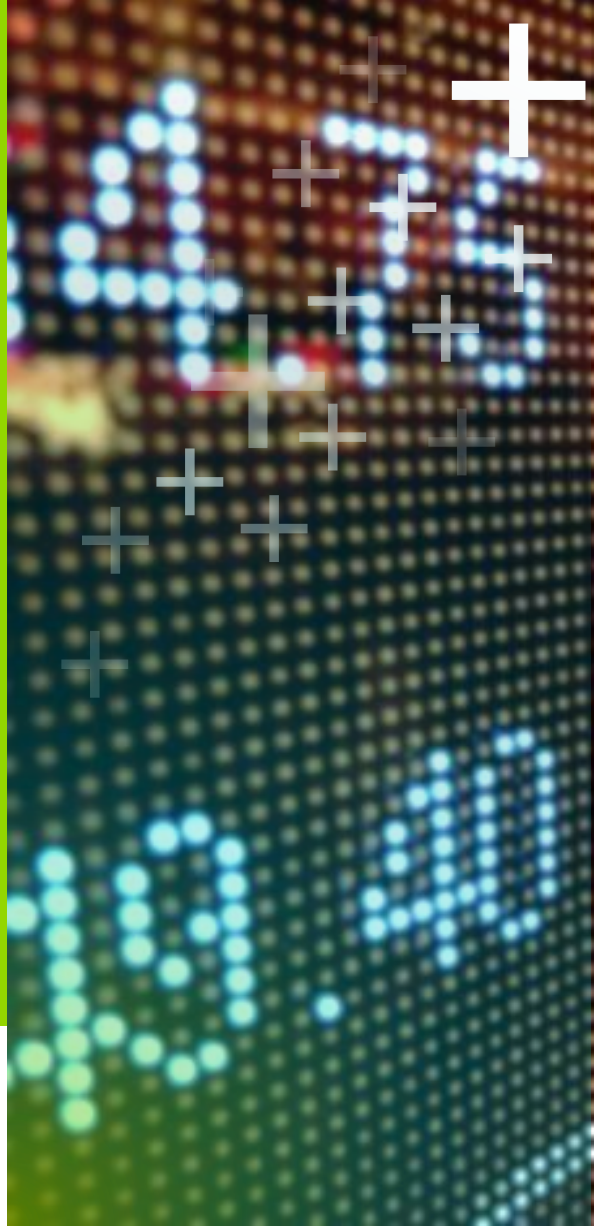
- Across EQM, EDM and FXM
- Walked through activities from start-up → opening → continuous trading → close → end-of-day

Trading Sessions & Allowed Functionality

- Executions, order submissions, amendments, cancellations, pegged/hidden behaviour, IOC/FOK rules and market data updates

API & Technical Structure

- Trading gateways (Native/FIX)
- Drop Copy & Post Trade Gateway
- Market data Gateway (FAST, ITCH, FIX)
- Reference Data Flows



The recording and presentation from Session 1 can be accessed here, at the bottom of the page under "JSE @ Your Service Webinars"

Order Types

Market order:

-Executes at best available prices

- No limit price and fills across multiple price levels

-Anything left after sweeping expires

- **Enabled for EQM & EDM, Disabled for FXM**

Limit Order:

-Executes at your price or better

-Both price and volume specified

-Remainder stays in the book or expires (based on TIF)

- **Enabled for EQM, EDM & FXM**

Market if Touched (MIT):

-Parks the order until the trigger price is reached

-Once triggered, it enters the book as a Market Order

-Mainly used to take profits(Opposite of Stop Orders).

-**Enabled for EDM only**

Stop Order:

Activates and converts into a Market Order when the stop price is reached

- Trigger is based on the last traded price

-Once triggered → executes like a Market Order

- TIFs allowed : DAY, GTC,GTD and GTT

-**Enabled for EQM, EDM & FXM**

Stop Limit Order:

Activates and converts into a Limit Order when the stop price is reached

-Trigger is based on the last traded price

-Once triggered → enters as a Limit Order at the stated limit price

-TIFs allowed: DAY, GTC,GTD and GTT

-**Enabled for EQM, EDM & FXM**

Market to Limit (MTL):

-Starts as a Market Order, any leftover quantity converts to a Limit Order

-If no execution happens, it converts to a Limit Order at the Dynamic Reference Price

-Behaves like a market order in auctions, leftover quantity becomes a limit order at the auction price

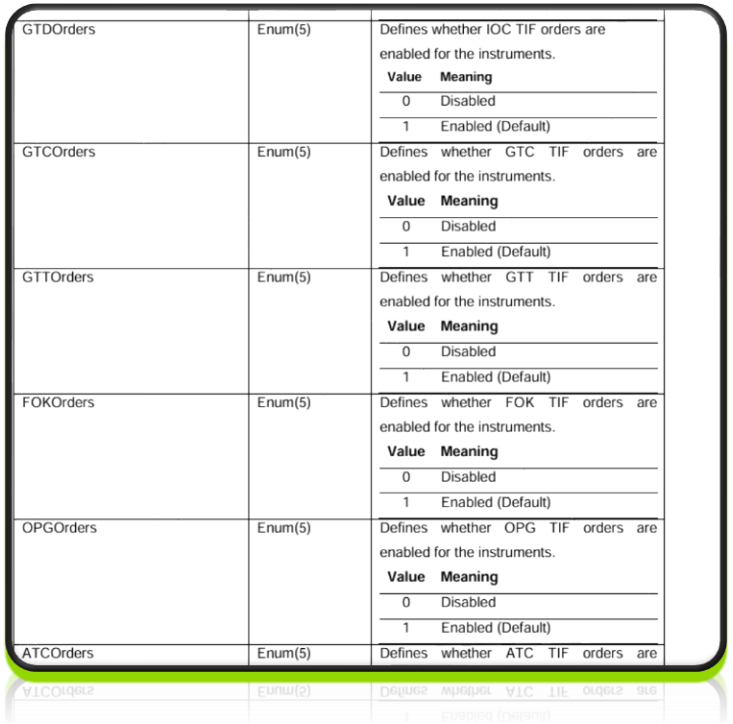
-**Enabled for EDM only**

Order Types – Technical Source

- Technically, the TradingParameter.csv file available as part of the reference data files on the JSE IDP site defines the order types enabled per segment.

- The TradingParameters.csv is defined in section 5.2.24 of **Volume 09 – Trading and Clearing Reference Data Management** which forms part of the JSE User Specification Documentation and is located on the JSE Client Portal > Technical Library here (https://clientportal.jse.co.za/technical-library/trading-and-market-data-documentation)

- Most trading-related details are maintained within this file for daily consumption from 22:30 the night before the next trading day (See JSE @ Your Service - Introductory Session for more details on reference data files)



GTDOrders	Enum(5)	Defines whether IOC TIF orders are enabled for the instruments. **Value** **Meaning** 0 Disabled 1 Enabled (Default)
GTCOrders	Enum(5)	Defines whether GTC TIF orders are enabled for the instruments. **Value** **Meaning** 0 Disabled 1 Enabled (Default)
GTTOrders	Enum(5)	Defines whether GTT TIF orders are enabled for the instruments. **Value** **Meaning** 0 Disabled 1 Enabled (Default)
FOKOrders	Enum(5)	Defines whether FOK TIF orders are enabled for the instruments. **Value** **Meaning** 0 Disabled 1 Enabled (Default)
OPGOrders	Enum(5)	Defines whether OPG TIF orders are enabled for the instruments. **Value** **Meaning** 0 Disabled 1 Enabled (Default)
ATCOrders	Enum(5)	Defines whether ATC TIF orders are

Time in Force (TIF) Order Validity

Time in Force instructions specify how long an order remains active and which sessions it may participate in. Some TIFs trigger immediate execution, while others are used for specific sessions or timings.

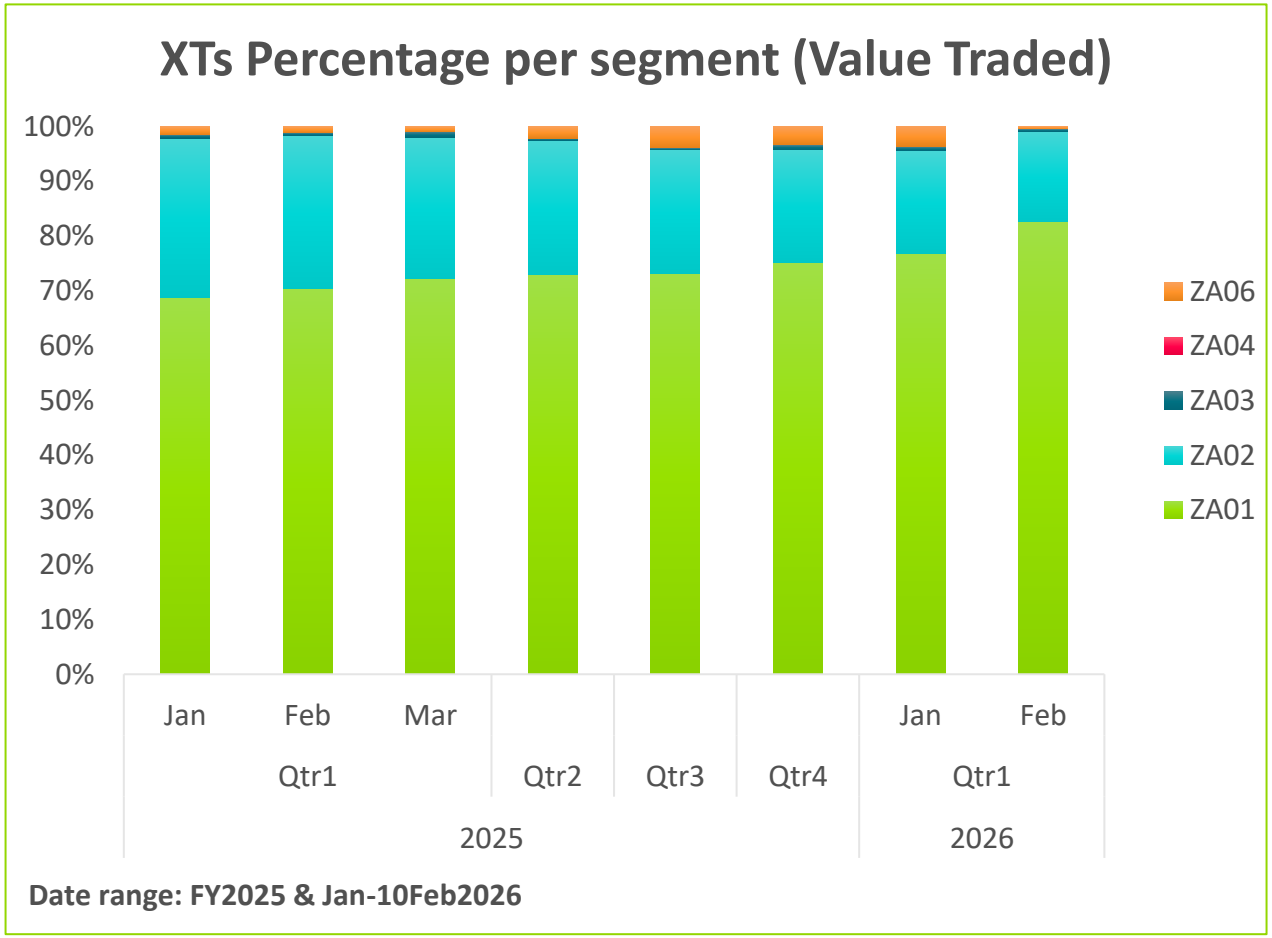
TIFs executed during Continuous Trading	Auction TIFs (Including CPX)
DAY – Active for the trading day; expires at Market End	**OPG – Opening Auction** Valid only for the Opening Auction.
IOC- Immediate or Cancel Execute what you can now; cancel the remainder.	**GFA – Good For Auction** Directs order to the next auction (Opening, Volatility, Resume, Intraday, Closing).
FOK – Fill or Kill Execute everything immediately or cancel the order.	**GFX – Intraday Auction** Valid for the Intraday Auction only.
GTC – Good Till Cancelled Valid for up to 90 calendar days.	**ATC – At The Close** Valid for the Closing Auction only.
GTD – Good Till Date Valid until a specified expiry date but limited to max 90 calendar days.	**CPX – Closing Price Cross** Valid for the CPX session; Executes only at the official Closing Price
GTT – Good Till Time Valid until a specific time on the current trading day.	

***Note** : TIF cannot be amended — the order must be cancelled and resubmitted.*

Central Order Book Cross (XT)

- Internal cross: buy & sell from the same member firm
- Submitted as a *New Order Cross* message type
- Must be a limit order with TIF = DAY
- Price must be within the best bid-offer spread
- Does not trigger volatility auctions
- Executions are considered as on-screen trade
- Two pricing modes exists:
  - **Fixed Price** – reject if price is outside BBO
  - **Adjustable Price** –system adjusts into valid range
- **Trade dissemination**:
  - Published via normal market data channels
  - **MITCH** : Trade message
  - **FAST**: Market Data Incremental Refresh message

Note: XT executions do not update order book statistics



Date range: FY2025 & Jan-10Feb2026

*The trade fee for XT's is 0.50 bps of each trade leg, capped at R554.28 ex VAT (R637.42 including VAT). Please see JSE Price List **here***

Example – Central Order Book Cross

Consider the below order book:

Instrument: JSE					
Order ID	Bid Size	**Bid Price**	**Offer Price**	Offer Size	Order ID
B1	100	**100**	**107**	500	S1
B2	200 (400)	100	108	200	S2
B3	100	99	109	600	S3

Pricing Rule for Cross Orders (Fixed Price):

Best Bid and Offer is displaying 100 | 107 – any order submitted within (not at) this range will be accepted (i.e. 101,102,103,104,105 and 106)

Example – Central Order Book Cross

Consider the below order book:

Instrument: JSE					
Order ID	Bid Size	**Bid Price**	**Offer Price**	Offer Size	Order ID
B1	100	**104**	**105**	500	S1
B2	200 (400)	100	111	200	S2
B3	100	99	111	600	S3

Pricing Rule (Fixed Price Cross with 1-tick spread)

Best Bid and Offer is displaying 104 | 105 – any order submitted within (not at) this range will be accepted – however, Cross Orders must be priced within the BBO (not 104 or 105), Because there is no whole tick between 104 and 105, the system allows half-tick pricing, therefore, 104.5c is accepted as a valid Cross Order price

Example – Central Order Book Cross (Price Adjustable)

A market participant had seen the previous BBO of 100 | 107 and entered a cross order at 104c – however, a new buy order had entered at 105; potentially rejecting the cross order for not being within the spread

Instrument: JSE					
Order ID	Bid Size	**Bid Price**	**Offer Price**	Offer Size	Order ID
B1	100	**105**	**107**	500	S1
B2	200 (400)	100	108	200	S2
B3	100	99	109	600	S3

The market participant had selected the *Internal Cross (Price Adjustable) Cross Type* option when submitting the cross order, which ensured that the order matched at the prevailing mid price of the instrument – 106c.

This is enabled via the field *Cross Type = 50* on the *New Order Cross* message.

Cross Type	The type of the Cross Order:	
	Value	**Meaning**
	5	Internal Cross
	50	Internal Cross (Price Adjustable)

Iceberg Orders

- Ability to rest a large order on exchange without displaying the total size
- Only the instructed visible portion of the order is published on market data - the rest remains hidden on the order book
- When the visible quantity is filled, the system replenishes the visible portion automatically (Replenishment is random so that market participants cannot detect Icebergs)
- Hidden portions of orders at the same price, are matched in a pro-rated fashion
- Order Types allowed: Limit, Market, Stop or Stop-Limit, with any supported TIF
- Price-Visible-Time priority is maintained
- During auctions, the full order quantity participates

Fees applicable to Iceberg Orders		
Trade Fee	**Trade Cap (Ex VAT)**	**Trade Cap (Inc VAT)**
0.50 bps	R554.28	R637.42
0.50 basis points of value of each trade leg, subject to ceiling limit(trade cap)		

Example – Iceberg trade and random replenishment

Key to the **JSE Iceberg offering** is a random replacement mechanism.
When the quantity of an iceberg order is fully executed the trading engine will replenish the visible order quantity.
This is done at random and will never exceed the originally specified visible order quantity.

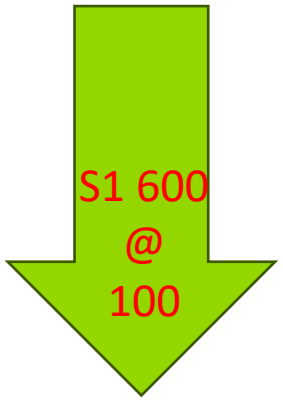
E.g.

- An Iceberg order is submitted: **Total 56,000** = **1,000** visible + **55,000** → depicted as **1,000 (55,000)**
- An **aggressive** order trades a volume of 2,000 → consumes 1,000 visible + 1,000 hidden quantity
  - Remaining total 54,000
- This could be depicted as 0 (54,000) – however, this would be a fully hidden order, which is not allowed
  - The trading engine instantaneously replenishes the visible quantity to 950 – depicted as 950 (53,050)
- Further executions: Once the 950 is fully traded, the trading engine will automatically replenish again – depicted as 865 (52,185)
- Replenishment is random within configured bounds and will never exceed the initial visible quantity of 1,000
- On each replenishment the Public Order ID changes; the Private Order ID remains the same throughout the life of the order.

Example – JSE Iceberg order functionality vs Third party icebergs

The whole order resides on the JSE book when using the JSE iceberg functionality; one specific example of a benefit of this would be when a large order aggresses the order book executing against a number of resting orders. Due to the atomic nature of the transaction on-exchange and the delayed response of a third party solution, execution experience will be different.

JSE Iceberg		
Order ID	Bid Size	Bid Price
B1	100	100
B2	**200 (400)**	**100**
B3	100	100



Source-system Iceberg		
Order ID	Bid Size	Bid Price
B1	100	100
B2	**200***	**100**
B3	100	100

An aggressive sell order (S1) with TIF IOC enters the order book and executes against all visible portions of orders B1, B2, B3. B2 represents an order for 600 volume when submitted as a JSE Iceberg, and 200 volume when submitted as a source-system iceberg.

Trades: B1: 100; B2: 200; B3: 100 **and B2:200**
Trade Quantity: 600

Trades: B1: 100; B2: 200; B3: 100
Trade Quantity: 400

Example – JSE Iceberg order functionality vs Third party icebergs

S1 is fully filled when JSE Iceberg functionality is used and partially filled and expired when using source-system iceberg functionality. The order books now look as follows:

JSE Iceberg		
Order ID	Bid Size	Bid Price
B2	100 (100)	100

B2 using the JSE Iceberg rests on the book with 100 visible. In total only 200 quantity remains.

Source-system Iceberg		
Order ID	Bid Size	Bid Price
B2	100*	100

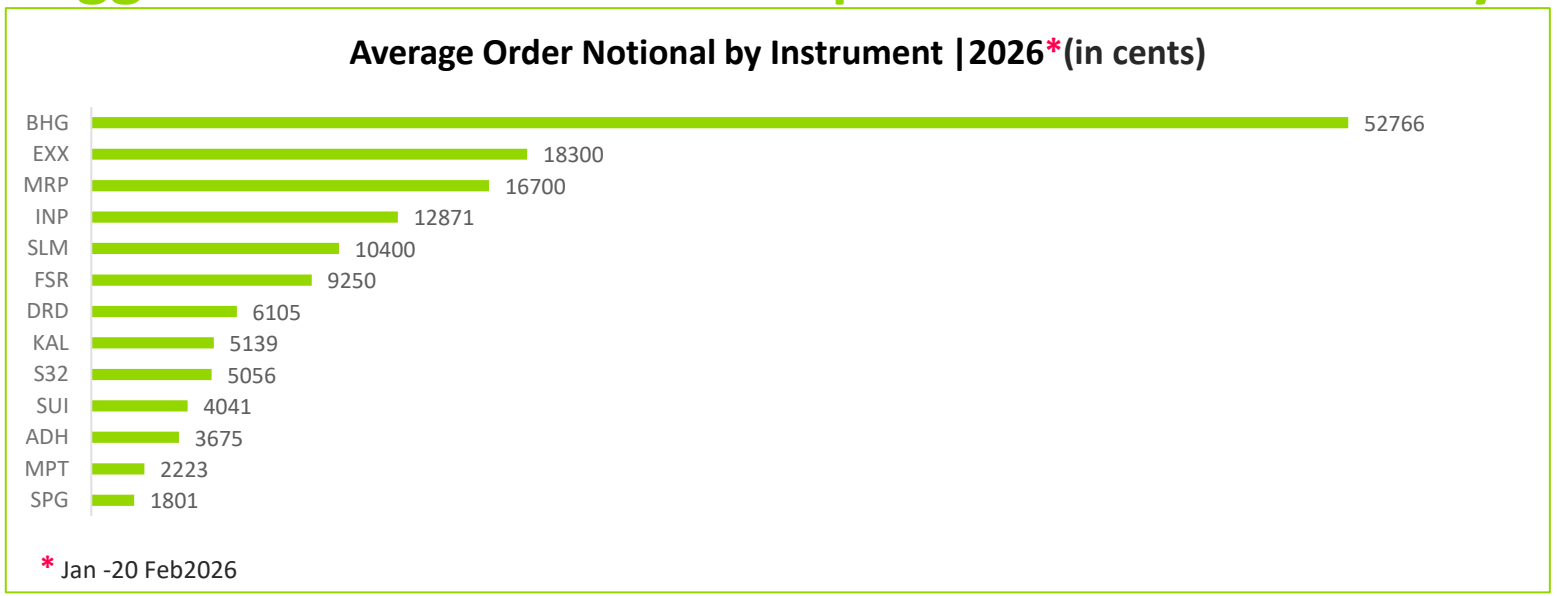
B2 using the source-system iceberg functionality still has a total order size of 400 (600 – 200) = 400
B2 is replenished with 100 orders by source-system, and has missed out on 200 volume.

Pegged Hidden Orders

Pegged Hidden Orders	Pegged Hidden Limit Orders
Fully hidden orders (no visible price or volume)	Same as Pegged Hidden Orders but with a **hard limit price**
Peg to **Best Bid** or **Mid-Point** for buys, and **Best Offer** or **Mid-Point** for sells	Order remains active only if the pegged price does not breach the limit
Volume in visible field must be 0	If breached → order becomes inactive (no execution)
Must include a Minimum Execution Size **(MES)**	Inactive orders remain in the system until market prices move back within the limit
MES must be ≥ Minimum Reserve Size	Amendments allowed anytime (active or inactive)
Allowed in: Opening Auction, Continuous Trading, Volatility/Intra-day/FCO/Re-Opening Auctions	Inactive orders do **not** lose time priority
If no midpoint/best bid/best offer exists → order becomes inactive until updated	Hidden orders pegged to best bid/offer use **price-improvement logic** • Ensures execution does not disadvantage visible orders • Improvement = half a tick (0.5 ZAc)
MES ignored during auction call sessions	
Only allowed TIF: **DAY**	
After partial execution: Remaining < MRS → expire Remaining ≥ MRS but < MES → expire Remaining ≥ MRS and ≥ MES → stay or expire per TIF	

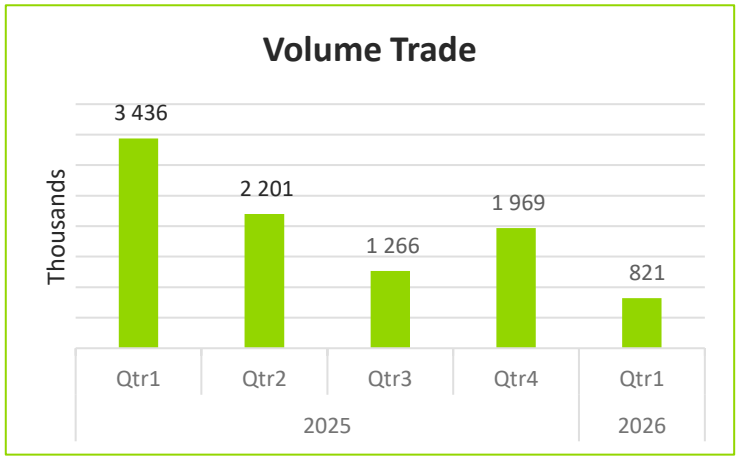
*The trade fee for Pegged hidden orders is 0.50 bps of each trade leg, capped at R554.28 ex VAT (R637.42 including VAT). Please see JSE Price List **here***

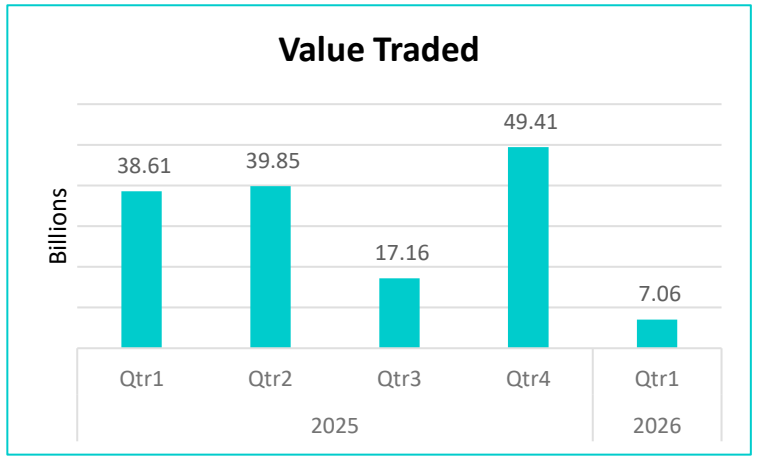
Pegged Hidden Limit Orders |Order & Trade Activity

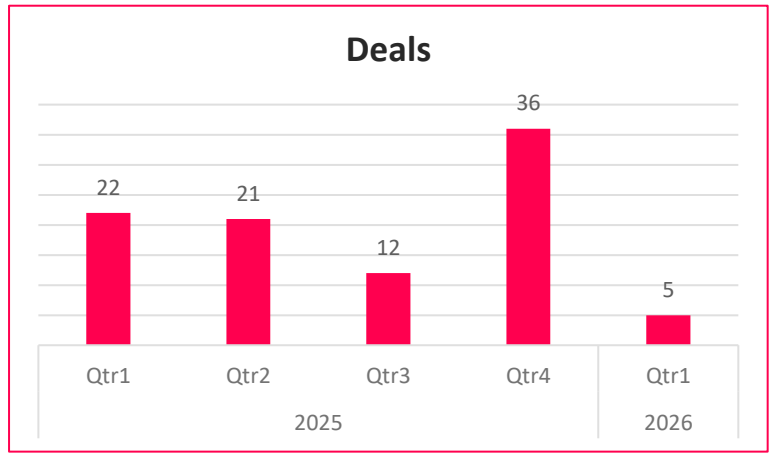


Key Highlights:

- Consistent daily submissions of Pegged Hidden Limit orders
- Orders show clear intent, with average notional values ranging from 1,800c to 52,700c
- Activity is concentrated in a small number of members
- Pegged Hidden Limit orders have shown interaction with visible limit orders
- Activity spans multiple instruments







Example – Pegged-to-Mid Hidden Order Trade

Instrument: IMP					
Order ID	Bid Size	**Bid Price**	**Offer Price**	Offer Size	Order ID
			Pegged-to-Mid	41,813	SH
B1	137	29,098	29,136	199	S1
B2	8	29,094	29,136	237	S2
B3	149	29,094	29,136	3	S3
			29,136	369	S4
			29,136	128	S5

On instrument IMP, a Sell (SH) Pegged-to-Mid Hidden order is resting on the order book with a Volume of 41,813.

A Buy order (B4) with TIF IOC enters the order book with 42,621 @ 29,136c

Example – Pegged-to-Mid Hidden Order Trade

Instrument: IMP					
Order ID	Bid Size	**Bid Price**	**Offer Price**	Offer Size	Order ID
B4	**42,621**	**29,136**	Pegged-to-Mid	41,813	SH
B1	137	29,098	29,136	199	S1
B2	8	29,094	29,136	237	S2
B3	149	29,094	29,136	3	S3
			29,136	369	S4
			29,136	128	S5

Trades Match as follows:

T1: B4 and SH - 41,813 @ 29,117.5c – Mid-point of BBO (29,098c | 29,136c) [Trade fee Cap hit**]**

T2: B4 and S1 – 199 @ 29,136c

T3: B4 and S2 – 237 @ 29,136c

T4: B4 and S3 – 3 @ 29,136c

T5: B4 and S4 – 369 @ 29,136c

Example – Pegged-to-Mid Hidden Order Trade

Instrument: IMP					
Order ID	Bid Size	**Bid Price**	**Offer Price**	Offer Size	Order ID
B1	137	29,098	29,136	128	S5
B2	8	29,094			
B3	149	29,094			

B4 is fully filled and has swept the book until only S5 remains on the sell side.

Closing Price Cross (CPX) Orders

- Orders with this time qualifier are directed to the Closing Price Cross session (CPX)
- Can be entered during other sessions that accept orders and remain parked until the Closing Price Cross session starts
- Only valid for the current trading day will expire at the end of the CPX session
- CPX orders can only have be submitted with order types Limit and Market.

The CPX session at the end of the trading day once a closing price has been determined, allows market participants to trade **at the closing price for a further 8min** before instruments move into the Post Close Session.

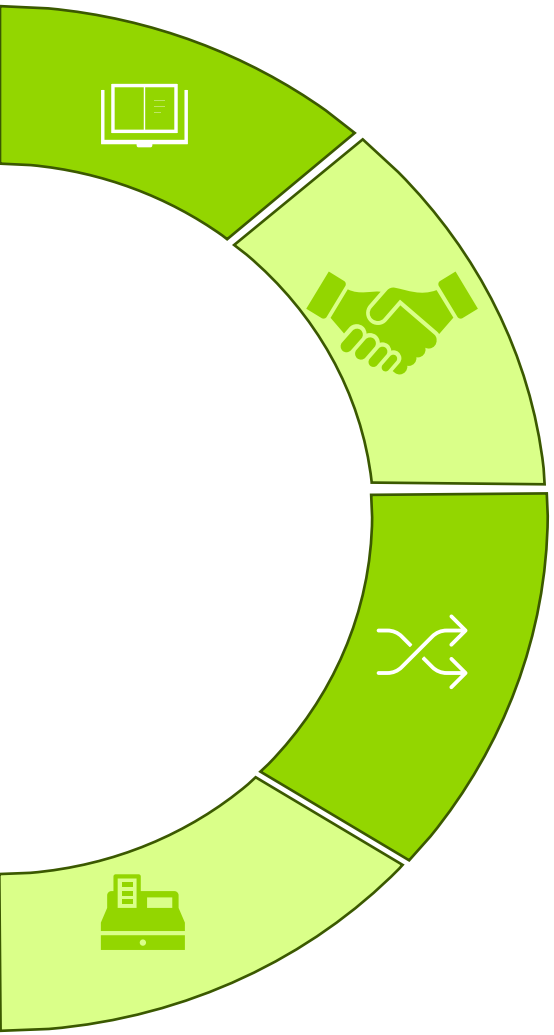
- At the start of the CPX session, parked CPX orders will be injected to the normal orderbook if they satisfy the following conditions:
  - The price of the parked CPX order is equal to the published Closing Price; or
  - The price of the parked CPX order is better than the published Closing Price. E.g. On the Buy side of the order book, if the published closing price is 100 ZAC and the CPX order price is 101 ZAC then the CPX order is re-priced to 100 and will participate in the CPX session.
  - Parked CPX orders with worse prices than the published Closing Price will be expired at the start of the Closing Price Cross session.
  - Trades are AT's and billed as per the JSE Price List.

TIF Compatibility Matrix

Our equities platform offers a range of order types and modifiers designed to optimize cost, reduce risk, and create efficiencies in the market. The table below shows how each TIF, order type and order attribute is validated against each other

	OPG	GFA	GFX	ATC	DAY	IOC	FOK	GTC	GTD	GTT	CPX
Market	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Limit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pegged Hidden					✓						
Pegged Hidden Limit					✓						
Stop					✓	✓	✓	✓	✓	✓	✓
Stop Limit					✓	✓	✓	✓	✓	✓	✓
Cross					✓						
Iceberg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Order Attributes



When submitting an order or a Central Order Book Cross (XT), certain key fields must be provided. These fields determine how the order behaves, who it represents and how long it remains active.

Standard Order

Fields required when submitting a regular order:

- Instrument ID, Quantity , Price
- Order Type (Market, Limit, Stop, Stop-Limit)
- Client Account
- Trader/Trader Group

Central Order Book Cross

Fields required when submitting a Cross Trade:

- Cross ID, Cross Type (Internal Cross)
- Buy Side: Capacity, Client Account, Trader Mnemonic
- Sell Side: Capacity, Client Account, Trader Mnemonic
- Instrument ID, Quantity, **TIF = Day only**
- Limit Price (must be within BBO)

Order Capacity

Defines who the order belongs to:

Agent (A) – Trading on behalf of a client

Principal (P) – Trading for the firm's own account

Order Side

The direction of the order:

Buy (B)

Sell (S)

New Order and New Order Cross message formats are available in the technical specifications (Link here)

Order Management

How the system handles orders after submission

Amendments

- Allowed for **Open, Parked Hidden** orders
- Amendable fields : **Quantity**, **MES**, **Limit Price**, Expiry TIFs (GTD/GTT), **Client Account**
- Client Account amendments must be within the same trading day (Open/Parked only)

Cancellations

-Only **Open** or **Parked** orders may be cancelled
- Cannot cancel **filled/ expired /rejected** orders
- Optional: Firms can enable auto-cancel on disconnect at CompID level

Priority Rules

-Increase quantity → loses time priority
-Price amendment → loses price + time priority
-Reduce quantity → retains priority
-Main ↔ Parked movements do not change priority

Special Cases

Stops /Stop Limits (unelected):

- Increase qty or change stop price → treated as new order (priority lost)

-reduce qty or amend limit price → priority retained

-OOBD: Download all Open / Parked / Hidden orders (limit 1000 requests/day)

IOC and FOK order types auction – high level with deep dive in June

Immediate or Cancel (IOC) and Fill or Kill (FOK) orders are aggressive orders that do not persist on the order book.

Their intention is to execute against either whatever is on the opposite side of the order book (IOC) or an exact quantity specified (FOK).

At times these orders trade large quantities and trigger Volatility Auctions. Since the order is expired at the end of this process there is no way of ascertaining that a Volatility Auction was triggered.

An enhancement will be introduced in release 1.8.5 (Q3) where the Execution Report rejection code will specify that there was an expiry “due to volatility auction trigger”

Thank you

Kindly scan the QR code to share your feedback, or use the survey link in the chat

let's connect