# **Johannesburg Stock Exchange**

# **Equity Market Trading and Information Solution**

**JSE Specification Document** 

**Volume 09E - JSE Reference Data Management (Equity Market)** 

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# 1 DOCUMENT CONTROL

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## 1.2 Document Information

Drafted By	JSE Trading and Market Services: TMS Trading	
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## 1.3 Revision History

Date	Version	Description	
02 August 2011	1.00	Initial Draft	
7 February 2012	1.01	Specification clarification and revision	
14 June 2012	1.02	Specification clarification and revision	
1 August 2012	1.03	Corrected the FCO Trading Cycle ID value to reflect the correct FCO Cycle identifier and not a Yes/No Value as per test environment sample data. Added some guidance on the formatting of data within the csv files.	
19 October 2012	1.04	Additional fields added to Instrument Equity as requested by clients for regulatory purposes namely, Instrument Type and No of Shares in Issue.	
9 July 2013	2.00	Functionality updates related to the 2013 product upgrade	
28 August 2013	2.01	As requested by clients, addition of the new WarrantsDetail CSV File to provide the salient terms related to Warrants as part of the Trading Reference client. E.g. Strike price, cover ration etc.	
18 October 2013	2.02	Minor corrections to Trading parameter table values	
22 August 2014	2.03	Ability to submit Exclude Hidden Limit Orders added As requested by clients, additional fields appended to the WarrantsDetailNew CSV File	
29 February 2016	3.00	Integrated Trading and Clearing Project changes.  Equity Market Enhancements:  Hidden Order functionality enhanced Introduction of On Book Cross Order Trade Introduction of EOD Volume Auction	
31 May 2016	3.01	Updated the Trading Parameters Table to remove the Release Orders field and include the Market Orders field.     Removed the Exchange Rates from the summary table in section 5.1.     Updated OffBookOrderBook table to remove the FuturesCloseOut field, as this field is only applicable to On books.     Rename the WarrantsDetailNew file to be WarrantsDetail.csv. Effectively the old WarrantsDetail file is discontinued and the old WarrantDetailNew file is renamed.	
05 August 2016	3.02	Added "Ref Price Allowance (%)" field to the "Trading Parameters" CSV file.	

15 November 2016	3.02	Document renamed to align to the new standard	
		Volume XXB B or BLANK = document applies to all markets	
		Volume XXD D = document applies to Derivatives markets	
		Volume XXE	E = document applies to Equity market
5 February 2018		5.2.6 Amendment to field name change from 'EMS' to 'BT/OP min Value'	

#### 1.4 References

None

#### 1.5 Contact Details

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## 2 OVERVIEW

Static trading reference data for the new JSE Equity Trading System will be made available to clients on a daily basis via the JSE Information Delivery Portal (IDP) using the File Transfer Protocol (FTP), or FTPS File Transfer Protocol with SSL security (FTPS).

Clients are required to download the reference data daily, prior to market start, in order to ready their systems for the trading day.

Reference data will be published as a complete set of data, not an incremental update. Therefore, each day's reference data will be a complete set, and clients are expected to download and process all reference data daily.

The FTP files will be made available via the JSE's current IDP service. Further information related to gaining access to the IDP service is provided within the IDP Connectivity Document at the following link:

Market Data - Technical Documents

## 3 TRADING REFERENCE DATA SERVICE DESCRIPTION

#### 3.1 System Description

The trading reference data files are provided via the JSE Information Delivery Portal (IDP) using the File Transfer Protocol (FTP) or FTPS File Transfer Protocol with SSL security (FTPS). To be able to access the IDP service, you will need to have a valid UserID and Password which can be requested via the JSE Customer Support team.

#### 3.2 IDP Service Connectivity

Further information related to gaining access to the IDP service is provided within the IDP Connectivity Document at the following link:

Market Data - Technical Documents

## 3.3 Timings and Data Retention

Trading reference data files will be made available by 22h30 SAST on each trading day. It is recommended that Clients download and process the trading reference data files prior to 06h00 SAST, which is when all GTC/GTD order expiries are expected to be published via the Market Data Gateways.

Trading reference data files will be kept on the IDP service for a rolling 30 business day period.

#### 3.4 Formats

Files are provided in CSV format. Certain text, (string/varchar) values in the CSV files may contain the comma (,) character within the actual field value, (e.g. InstrumentsEquity.csv SecurityDescription field) to aid column identification all text, (string/varchar) field values will be encapsulated with double quotes, (e.g. "A E C I 5,5% Cum Pref").

All comma (,) characters within double quotes, ("") should therefore be ignored and treated as a normal text character when importing data from the CSV file.

Additional guidance has been included in this document for clients to consider when processing the Trading Reference data CSV files, as follows:-

- a. The Client Files will NOT contain header rows.
- b. Values will not be padded.
- c. String field examples: (CSV file output) for field of 4 characters in length

Description	String Example	CSV File Output
A value containing a comma:	Abcd, efg	"Abcd, efg"
A value with a quote	A"bcd	"A""bcd"
A value with a quote and a comma	A"b,cd	"A""b,cd"
A value with no special chars	Abcd	"Abdc"

- d. Empty strings will be represented as ",,".
- e. The date will be represented as YYYY/MM/DD. The message sent to the client will contain the '/' in the date. Example of the Date: 2011/08/19.

- f. The time will be represented as HH:MM:SS.fffffff where, fffffff = an optional number of milliseconds, which ranges from "0010000" to "9990000". Example: 14:58:11.1891973
- g. A Full stop will be used to indicate decimal points in numeric values
- h. The client files will not be compressed on the IDP service.
- i. Client Files uploaded to IDP will contain a .csv extension.
- j. Each record will be terminated by an AppendLine which is equal to "\r\n" (ASCII: 0x0D0A

## 3.5 Naming Conventions

## 4 RECOVERY

## 4.1 Server Failures

The JSE IDP service is designed for high availability during peak times and will operate out of the JSE Remote DR site in the event where the JSE invokes its disaster recovery procedure.

# 5 MESSAGE FORMATS AND TEMPLATES

This section provides details on the types of trading reference data which will be available to clients.

## 5.1 The table below summarises the data:

MIT Entity Name	JSE Entity & Alternative Name/s	Filename	Provide to Clients
Calendar Entries	Calendar entries confirming the different trading days per Calendar.	CalendarEntries.csv	Daily
Corporate Action Table Entries	This includes the Ex Markers and Annotations per Instrument with Effective From Date and Effective To Date	CorporateActionIndicatorTable Entries.csv	Daily
Currencies Table	Trading Currency Data	Currencies.csv	Daily
Ex Markers and Annotations Table	This includes all valid Ex- Markers and Annotations for the JSE and NSX Markets	ExMarkers.csv	Daily
Firms	Equity Members (Participant/Broker)	Firms.csv	Daily
Index Name	This includes the Index details and descriptions for JSE and NSX Indices.	Indices.csv	Daily
Instrument – Equity	Instrument Reference Data	InstrumentsEquity.csv	Daily
Markets	Exchange defined Markets	Markets.csv	Daily
Order Book	Order books per instrument and includes the trading cycle applicable for the day per instrument per order book.	OrderBooks.csv	Daily
Post Trade Parameter Table	This includes the trade types and trade reporting policies per segment.	PostTradeParameters.csv	Daily
Segment	This includes the segment details.	Segments.csv	Daily
Session Parameter Entries	This includes the session parameter entries per session.	SessionParameterEntries.csv	Daily
Session Reason Table Entries	This includes the session reasons codes and descriptions.	SessionReason.csv	Daily

MIT Entity Name	JSE Entity & Alternative Name/s	Filename	Provide to Clients
Tick Structure Entries	This includes the tick structure entries per Tick structure.	TickStructureEntries.csv	Daily
Tick Structure Table	This includes the tick structure ID and descriptions.	TickStructures.csv	Daily
Time Zone	This provides the time zone details.	TimeZones.csv	Daily
Trade Type Entries	This includes the trade type details per trade type.	TradeTypeEntries.csv	Daily
Trading Parameters	This includes various trading parameters per segment.	TradingParameters.csv	Daily
Trading Sector	This includes the trading sector details per instrument.	SectorInstrument.csv	Daily
Warrants Detail	This includes salient characteristics for all warrant instruments e.g. strike price, cover ratio etc.	WarrantsDetail.csv	Daily
Exchange Rates Entries	This includes the Exchange Rate details.	ExchangeRateEntries.esv	<del>Daily</del>

## 5.2 CSV File Layouts

#### 5.2.1 Calendar Entries

The Calendar Entries CSV file will be downloaded with the following layout. Each entry defines a holiday for this calendar.

File name: CalendarEntries.csv

Field Name	DataType	Description
TableID	Varchar(30)	Name of the calendar. E.g. JSE
CalendarDate	Date	Defines the date for which the public holiday is being specified. E.g. 2011/12/25
Description	Varchar(30)	Human readable description of the public holiday. E.g. Christmas Day
TradingAllowed	enum(5)	Specifies whether this date is a trading holiday (weekends & public holidays) or not.
		Value Meaning
		0 No
		1 Yes
EarlyClose	enum(5)	Whether this date is an early close for the market.
		Value Meaning
		0 No
		1 Yes
FuturesCloseOutDay	enum(5)	Whether the particular date is a Futures Close Out day.
		Value Meaning
		0 No
		1 Yes
	1	

## 5.2.2 Corporate Action Indicator Table Entries

The Corporate Action Indicator Table Entries CSV file will be downloaded with the following layout

File name: CorporateActionIndicatorTableEntries.csv

Field Name	DataType	Description
InstrumentCATableID	varchar (30)	This will be the SYMBOL of the Instrument.
ExMarkerID	varchar (2)	Each Entry Defines an Ex Marker or Annotation
EffectiveFromDate	Date	Effective from date for the Ex Marker. Format will be YYYYMMDD.
EffectiveToDate	Date	Effective to date for the Ex Marker.
		Format will be YYYYMMDD.

## 5.2.3 Currencies

The Currencies CSV file will be downloaded with the following layout

File name: Currencies.csv

Field Name	DataType	Description
CurrencyID	varchar(10)	Unique identifier for the currency. E.g. ZAC
Description	varchar(100)	Description specified for the currency.

## 5.2.4 Ex Markers

The Ex Markers CSV file will be downloaded with the following layout: -

File name: ExMarkers.csv

Field Name	DataType	Description
ExMarkerID	varchar (2)	Unique Ex Marker ID
ExMarkerType	enum (5)	0 - Ex-Marker 1 - Annotation
Description	varchar (50)	Description relevant to the Ex-Marker or Annotation.

## 5.2.5 Firms

The Firms CSV file will be downloaded with the following layout: -

File name: Firms.csv

Field Name	DataType	Description
BrokerID	varchar(11)	A unique identifier of the Firm or Information Subscriber across the system per market. This is the Firm ID.
Description	varchar(100)	The full legal name of the Firm.
MemberAlphaCode	varchar(30)	A unique identifier of the Firm across the system. This is the Firm's Alpha Code.
ExchangeCode	varchar(10)	The exchange to which the firm belongs
Reserved1	Enum(5)	Linked to functionality that will be introduced in a future release.

## 5.2.6 Instruments Equity

The Instruments Equity CSV file will be downloaded with the following layout

File name: InstrumentsEquity.csv

Field Name	DataType	Description
Symbol	varchar(25)	The unique JSE instrument alpha code of the
	1 3 ( 2 3 )	instrument.
InstrumentID	varchar(9)	The unique JSE numeric identifier of the instrument
SecurityDescription	varchar(30)	The human readable security name. Any character may be used.
MarketID	varchar(30)	Identifies the market to which the instrument belongs.
ISIN	varchar(30)	International Securities Identification Number.
ReferencePrice	decimal(15,4)	The reference price of an instrument. It is used to in the calculation of the following:  - Static Reference Price  - Dynamic Reference Price
Trading Currency	varchar(10)	Trading currency of the instrument expressed as a 3 letter currency code. The recommended values are the ISO4217 currency codes which will be specified through the Currency table. E.g. ZAC, EUR, USD, GBP.
Segment	varchar(30)	Identifies the Segment to which the instrument belongs.
InstrumentStatus	enum (5)	The trading status of the instrument.
		Value Meaning
		0 Active
		1 Suspended
		2 Inactive
		3 Halt
TradingParameters	varchar(30)	Defines the trading parameter table that defines the trading characteristics of the instrument.
PostTradeParameters	varchar(30)	Defines the post trade parameter table that defines the trade enrichment characteristics of the instrument.
BT/OP min Value ▼	decimal(20,4)	Defines the minimum Block Trade (BT) and Off Book Principal Trade (OP) value (c), E.g. 10000000000
MinReserveSize	decimal(30,15)	Defines the minimum quantity for a Hidden Order. E.g 100000
CalendarID	varchar(30)	Calendar for the instruments that are attached with this trading parameter.
CorporateActionIndicator	varchar(30)	Defines the Corporate Action Indicator table identifier that contains the Ex- Markers or Annotations for the instrument.
TIDM	varchar(4)	Tradable Instrument Display Mnemonic
PriceImproveTks	decimal(10,1)	The number of ticks by which the price is to be improved.

Deleted: EMS

**Deleted:** Exchange Market Size (Elefor the particular instrument.

Deleted: 2500

FCOTradingCycleID	varchar(30)	Futures Close	-Out Trading Cycle ID
	, ,	Value	Cut Trading Cycle 12
		ZA01_FC	0
		ZA02_FC	0
		ZA03_FC	0
		ZA06_FC	0
InstrumentType	Varchar (10)	This field will	contains the type of a tradeable
		Instrument . E	Example: Aord (A Ordinary Share)
		the Instrumer	trument Type" column below for ntType's that will be received on tsEquity.csv file.
		Instrument Type (i.e. CSV File Values)	Description
		Aord	A Ordinary Share
		Bord	B Ordinary Share
		Call	Call Options
		Deb	Debentures
		DepRec	Depository Receipts
		ETF	Exchange Traded Funds
		FPL	Fully Paid letters
		LU	Linked Unit
		LSU	Loan Stock Units
		Nord	N Ordinary
		NilPL	Nil Paid Letters
		Options	Options
		Ordinary	Ordinary Share
		PL	Participatory Interest
		PPL	Partially Paid Letters
		PS	Preference Shares
		Securities	Securities
		UT	Unit Trusts
		Vanilla	Vanilla Warrant
		Wave	Wave Warrant
		Comp	Compound Warrant
		Basket	Basket Warrant
		Barrier	Barrier Warrant
		Discount	Discount Warrant
		Index Ediv	Index Warrant Enhanced Dividend Warrant
		Spread	Spread Warrant
		Protected	Protected Warrant
		Variable	Variable Warrant
		Afutures	Agricultural Futures
		Aopt	Agricultural Options
		Ader	Agricultural Physical Deliveries
		Ffutures	Financial Futures
		Foptions	Options on Futures
		SSFUT	Single Stock Futures
	l	00.01	Chigle Clock Fulures

		SSOPT	Options on Single Stock Future
		FOnBonds	Bond Future
		OOnBonds	Options on Bonds
		J-Swaps	J-Swaps
		J-FRAs	J-FRAs
		J-TRIs	J-TRIs
		J-Carries	J-Carries
		J-Rods	J-Rods
		J-Notes	J-Notes
		Pbond	Primary Bond
	Sbond	Secondary Bond	
		KR	Kruger Rand
		UL	Unlisted Equities
		BondW	Bond Warrant
		CapW	Capped Warrant
		DivW	Dividend Warrant
		DEBT	Debt Instrument
SharesInIssue	Int (15)		contain the number of Shares that sued per Instrument. Example:

## 5.2.7 Markets

The Markets CSV file will be downloaded with the following layout

File name: Markets.csv

Field Name	DataType	Description
MarketID	varchar(30)	A unique name identifying the market instance that is set up. E.g. JSE Equity, NSX
TimeZoneID	varchar(30)	Time zone on which this market is present. This will be SAST for both JSE and NSX markets.
StartTime	varchar(30)	Start time of the market specified in SA Time. E.g.: 06:55:00
EndTime	varchar(30)	End time of the market specified in SA Time. E.g.: 18:00:00
Status	Enum(5)	Status of the market.
1		
		Value Meaning
		Value Meaning  0 Active
CalendarID	varchar(30)	0 Active
CalendarID AutoStart	varchar(30) Enum(5)	0 Active 1 Suspended
	, ,	0 Active 1 Suspended Calendar ID for the market. Specifies if the market will both start and end
	, ,	0 Active 1 Suspended Calendar ID for the market. Specifies if the market will both start and end automatically at the specified times.

F	laltReasonTable	varchar(30)	Specifies the table with the list of pre-defined halt reasons when the market is halted.
Е	arlyEndTime	Varchar(30)	Specifies the market end time on early close

## 5.2.8 Order Books

The Order Books CSV file will be downloaded with the following layout. Each instrument will have a Normal Order Book and an Off Order Book.

File name: NormalOrderBooks.csv

Field Name	DataType	Description
InstrumentID	varchar(9)	Unique identifier of the instrument.
StandardTradingCycleID	varchar(30)	Defines the trading cycle to be used for the instrument on a standard day.
EarlyClosingTradingCycleID	varchar(30)	Defines the trading cycle to be used for the instrument on an early closing day.
FuturesCloseOut	varchar(30)	Defines the trading cycle to be used for the instrument on a futures closeout day.

File name: OffBookOrderBooks.csv

Field Name	DataType	Description
InstrumentID	varchar(9)	Unique identifier of the instrument.
StandardTradingCycleID	varchar(30)	Defines the trading cycle to be used for the instrument on a standard day.
EarlyClosingTradingCycleID	varchar(30)	Defines the trading cycle to be used for the instrument on an early closing day.
FuturesCloseOut	varchar(30)	Defines the trading cycle to be used for the instrument on a futures closeout day.

## 5.2.9 Post Trade Parameters

The Post Trade Parameters CSV file will be downloaded with the following layout

File name: PostTradeParameters.csv

Field Name	DataType	Description
ObjectID	varchar(30)	Name of the post trade parameter. This should be the Segment ID for which the table is created. E.g. ZA01, ZA02, ZA03, ZA04, ZA05, ZA06, ZA11, ZA12.
OffBookMaxQty	Int(10)	An optional parameter which limits the quantity (volume of the trade) of Off Book trades accepted by the System. There is no limit to the quantity (volume of the trade) of an Off Book trade if a value is not specified for this parameter.
TradeTypes	varchar(30)	Defines the Trade Types supported by the instrument as per the JSE Trade Type Table.  A Trade Type table will be associated to the Post

		Trade Parameter Table.
TradeReportingPolicy	enum(5)	Defines how trades are reported to back office/clearing Systems.  The JSE always use Binary Trade Reporting
		model.  Value Meaning
		value Meaning
		0 Binary
		1 Non-Binary
OffBookMinQty	Int(10)	Defines the minimum quantity of an Off Book trade.
OffBookMinValue	Decimal(30,10)	Defines the minimum value of an Off Book trade.

## 5.2.10 Segments

The Segments CSV file will be downloaded with the following layout.

File name: Segments.csv

Field Name	DataType	Description
ObjectID	varchar(30)	Unique identifier of the Segment.
Description	varchar(30)	The human readable Segment name.
Status	enum(5)	Status of the Segment
		Value Meaning
		0 Active
		1 Suspended

#### 5.2.11 Session Parameter Entries

The Session Parameter Entries CSV file will be downloaded with the following layout

File name: SessionParameterEntries.csv

Field Name	DataType	Description
TableID	varchar(30)	Name of the session parameter. E.g. ZA01
TradingSessionID	enum (5)	Trading Session ID for which the parameters are set.
		Value Meaning
		0 Start of Trading
		1 Opening Auction Call
		2 Continuous Trading
		3 Closing Auction Call
		4 Post Close

I	1	ı <del></del>
		5 Re-Opening Auction Call
		6 Halt
		7 Halt and Close
		8 Pause
		9 Continuous Trading 1
		10 Continuous Trading 2
		11 Intraday Auction Call
		12 Volatility Auction Call
		13 FCO Auction Call
		14 Closing Price Publication
		15 Closing Price Cross
		16 EOD Volume Auction
StaticCircuitBreaker	decimal(8,4)	Static Circuit Breaker percentage. E.g. 30
DynamicCircuitBreaker	decimal(8,4)	Dynamic Circuit Breaker percentage. E.g. 10
StaticCBTks	Int(10)	The difference, in terms of the number of ticks, between the price or potential price of a trade and the Static Reference Price at which the outer circuit breaker should be triggered. E.g. 10
DynamicCBTks	int(10)	The difference, in terms of the number of ticks, between the price or potential price of a trade and the Dynamic Reference Price at which the outer circuit breaker should be triggered.
MarketOrderExt	int(10)	Number of market order extensions. E.g. 2
MarketOrderExtDuration	int(10)	Duration of a market order extension specified in seconds. E.g. 600
PriceMonExt	int(10)	Number of price monitoring extensions. E.g. 2
PriceMonExtDuration	int(10)	Duration of a price monitoring extension specified in seconds. E.g. 600

## 5.2.12 Session Reason

The Session Reason CSV file will be downloaded with the following layout

File name: SessionReason.csv

Field Name	DataType	Description
TableID	varchar(30)	Table ID of the Session Change Reason table.
ReasonCode	Int(10)	Numeric identifier for Reason Code. Any integer value.
Reason	varchar(60)	User defined reason.

## 5.2.13 Tick Structures

The Tick Structures CSV file will be downloaded with the following layout

File name: TickStructures.csv

Field Name	DataType	Description
TableID	varchar(30)	Name of the tick structure.
Description	varchar(30)	Human readable description of the tick structure.
Decimals	Int(10)	This gives the ability to specify an irregular tick. Prices will be accepted if a multiple of the Tick size or a value with equal number of decimal places as specified in this field is entered by the User.

## 5.2.14 Tick Structure Entries

The Tick Structure Entries CSV file will be downloaded with the following layout

File name: TickStructureEntries.csv

Field Name	DataType	Description
TableID	varchar(30)	Name of the tick structure
MinValue	decimal(18,8)	Minimum value of the range for which this entry is applicable.
MaxValue	decimal(18,8)	Maximum value of the range for which this entry is applicable.
TickValue	decimal(18,8)	Tick size to be used within the specified min/max ranges.

## 5.2.15 Time Zones

The Time Zones CSV file will be downloaded with the following layout

File name: TimeZones.csv

Field Name	DataType	Description
TimeZoneID	varchar(30)	Unique identifier of the zone
ZoneName	varchar(200)	Time Zone Name specified to identify the particular Time Zone. E.g. SAST
OffSet	Int(10)	Time Off set in minutes E.g. 120
Custom	enum (5)	This is used to define a custom time zone with a custom Off Set Value.
		Value Meaning
		0 No
		1 Yes

# 5.2.16 Trade Type Entries

The Trade Type Entries CSV file will be downloaded with the following layout

File name: TradeTypeEntries.csv

Field Name	DataType	Description
TableID	varchar(30)	Unique identifier to the table instance
ShortCode	varchar(30)	Trade Types are defined as per JSE requirements. Refer to JSE Trade Type table. E.g. BT, PF
Description	varchar(100)	Description of the Trade Type. Refer JSE Trade Type table. E.g. Block Trade
UpdateStatistics	enum(5)	Specifies whether Trade Type updates Market Data Statistics.
		Value Meaning
		0 No
		1 Yes
CapacityA_A	enum (5)	Specifies whether the Capacity combination Buyer Agency – Seller Agency is allowed for the Trade Type.  Value Meaning
		0 No
		1 Yes
CapacityP_P	enum (5)	Specifies whether the Capacity combination Buyer Principal – Seller Principal is allowed for the Trade Type.
		Value Meaning
		0 No
		1 Yes
CapacityA_P enum (5)		Specifies whether the Capacity combination Buyer Agency – Seller Principal is allowed for the Trade Type.
		Value Meaning
		0 No

	İ	
		1 Yes
CapacityP_A	enum (5)	Specifies whether the Capacity combination Buyer Principal – Seller Agency is allowed for the Trade Type.
		Value Meaning
		0 No
		1 Yes
TradeReportingModel	enum (5)	Defines the type of trade reporting allowed for the instrument associated with the parameter.
		Value Meaning
		1 Both
		2 Single
		3 Dual
PublishIndicator	enum (5)	Specifies whether the mode of publishing the Trade to the market via market data.
		Value Meaning
		0 Do Not Publish
		1 Immediate
TradeSubTypeValue	varchar(20)	Trade Sub Type numeric value

## **5.2.17 Trading Parameters**

The Trading Parameters CSV file will be downloaded with the following layout

File name: TradingParameters.csv

Field Name	DataType	Description
ObjectID	varchar(30)	ID of the trading parameter table This will be the Segment ID for which the table is created. E.g. ZA01
TickStructureID	varchar(30)	Tick Structure Table ID
StopOrders	enum (5)	Defines whether Stop and Stop Limits orders are enabled for the instruments.
		Value Meaning
		0 Disabled
		1 Enabled
SessionParameter	varchar(30)	Defines the Session Parameter table to be used with this trading parameter.
MaxOrderDuration	Int(8)	Defines the maximum number of days a GTD or GTC order is retained in the System. The duration will be specified in calendar days. E.g. 90
IAPPolicy	enum (5)	Frequency in which indicative auction information is published.

		Value Meaning
		0 Periodic
		1 Each Update
		2 None
FirstIAPFrequency	Int(10)	Defines the frequency of computing the IAP
		during the Auction call sessions in seconds.
		Only applicable if IAP Policy is Periodic.
SecondIAPStartTime	Int(10)	The duration (in minutes) prior to the uncrossing when the IAP computation frequency is changed.
		Only applicable if IAP Policy is Periodic.
SecondIAPFrequency	Int(10)	The frequency in seconds in which the IAP is computed after the second IAP start time.
		Only applicable if IAP Policy is Periodic.
OpeningPriceConvention	enum (5)	Defines the preferred method of determining the Opening price for an instrument.
		Value Meaning
		0 First Trade
		1 Opening Auction
		2 Mid Point
		3 None
PrimaryClosingPriceConvention	enum (5)	A mandatory parameter which defines the preferred method of determining the closing price for an instrument.
		Value Meaning
		0 None
		1 Closing Auction
		2 VWAP (Fixed Window)
		3 VWAP (Variable Window)
		4 Last Trade
		5 Mid Point
SecondaryClosingPriceConvention	enum (5)	Defines the method of determining the closing price for an instrument if CLOSING PRICE CONVENTION is "Closing Auction" and if a closing auction is not available in the System.  Value Meaning
		0 None
		1 VWAP (Fixed Window)
		2 VWAP (Variable Window)
		3 Last Trade
ClosingPriceDuration	Int (5)	4 Mid Point
ClosingPriceDuration	Int (5)	Determines the duration (in minutes) of trades considered for the VWAP closing

		price calculation.
MaximumRandomDuration	Int(10)	The uncrossing will occur at a random time after the scheduled end time of the session within the duration specified by the MAXIMUM RANDOM DURATION. Durations involving fractions of a second (e.g. 30, 0.5, 1.5, etc.) will be supported.
MinimumAuctionVolume	Int(10)	Defines the minimum quantity which needs to be uncrosses during an auction. This will be zero for the JSE.
CBRemainderPolicy	enum (5)	Determines whether the remainder of an order is added to the order book or expired if a circuit breaker is triggered.  For JSE implementation, the remainder is added to the order book; Hence this
		parameter is defaulted to 'Add to Order Book' and hidden.  0 – Add to Order Book 1 - Expire
CBTriggerSession	enum (5)	Determines the trading session to which the regular order book should be automatically moved to if a circuit breaker is triggered
		For JSE implementation, if a circuit breaker is triggered the order book will be moved onto Volatility Auction session, The system requires to set this parameter to 'Volatility Auction Call' in order to move the instrument into Volatility Auction session.
		0 - Halt 1 – Volatility Auction Call
AutoResumeDuration	Int(3)	Determines the duration (in minutes) for which the regular order book will remain in the Volatility Auction Call session once a circuit breaker is triggered. If a duration is not specified, the order book should remain in the specified session until it is manually moved to another session.  The ability to not specify a value for this field will be provided (i.e. it is "nullable").
HaltResumePolicy	enum (5)	Defines the method of moving an instrument onto the scheduled session upon changing the instrument status from Suspended to Active.  Manual – The Market Ops have to manually moves the instrument to the
		manually move the instrument to the scheduled session  Auto – The System will automatically move the instrument to the scheduled session.  Value Meaning
		0 Manual

		1 Auto
HaltResumeSession	enum (5)	Determines the Trading session that the instrument moves on, upon moving an instrument status from Suspended to Active.
		For JSE implementation the instrument will move onto Re-Opening Auction session. Hence this parameter will be defaulted to 'Re-Opening Auction Call' and hidden.
		0 – Regular Trading 1 – Re-Opening Auction Call
HaltResumeDuration	Int(10)	Defines the duration of the Re-Opening Auction triggered on moving an instrument from Suspended to Active.
		If this field is set to zero, it denotes that the instrument will stay in the session up until a Market Operations user manually changes the session.
EarlyCloseThreshold	Int(3)	An optional duration (in minutes) that determines whether the regular order book will move to the Closing Auction Call session early (i.e. instead of the Volatility Auction Call session) if a circuit breaker is triggered. If the time between when a circuit breaker is triggered and the start of the Closing Auction Call is within this duration, the order book should be moved to the Closing Auction Call session early (i.e. not the Volatility Auction Call session). E.g. 2
		The ability to not specify a value for this field should be provided (i.e. it is "nullable").
LotSize	decimal(15,5)	Defines the instrument's unit of trade.  Decimal sizes can be specified. The quantity of all orders must be a multiple of the instrument's Lot Size.
MaxQty	decimal(30,10)	Defines the Maximum allowed quantity of an order.
		This is defaulted to '999,000'. If '0' is specified the System will not allow the entry of orders.
MinimumSize	Decimal(30,10)	Defines the Minimum allowed quantity of an order. Decimal sizes can be specified.
GFAPolicy	enum (5)	Whether a GFA order may participate in multiple auctions.
		Value Meaning
		0 Multiple Auctions
		1 Single Auction
		2 None
StatRefPricePolicy	enum (5)	Whether the static reference price is always the previous close or whether it is to be updated by an auction

	1	1
		This will be defaulted to "Last Auction".
		Value Meaning
		0 Previous Close
		1 Last Auction
CBAlertPercentage	decimal(8,4)	The percentage difference between the price or potential price of a trade and the Static Reference Price at which an alert should be generated.
CBAlertTks	Int(10)	The difference, in terms of the number of ticks, between the price or potential price of a trade and the Static Reference Price at which an alert should be generated.
StaticCBPercentage	decimal(8,4)	The percentage difference between the price or potential price of a trade and the Static Reference Price at which the circuit breaker should be triggered. Used if session parameter is not used.
DynamicCBPercentage	decimal(8,4)	The percentage difference between the price or potential price of a trade and the Dynamic Reference Price at which the circuit breaker should be triggered. Used if session parameter is not used.
StaticCBTks	Int(10)	The difference, in terms of the number of ticks, between the price or potential price of a trade and the Static Reference Price at which the outer circuit breaker should be triggered. Used if session parameter is not used.
DynamicCBTks	Int(10)	The difference, in terms of the number of ticks, between the price or potential price of a trade and the Dynamic Reference Price at which the outer circuit breaker should be triggered. Used if session parameter is not used.
IOCOrders	Enum(5)	Defines whether IOC TIF orders are enabled for
		the instruments.
		Value Meaning
		0 Disabled
		1 Enabled (Default)
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)	

		enabled for the instruments.	
		Value Meaning	
		0 Disabled	
		1 Enabled (Default)	
FOKOrders	Enum(5)	Defines whether FOK TIF orders are	
TONOIUGIS		enabled for the instruments.	
		Value Meaning	
		0 Disabled	
		1 Enabled (Default)	
OPGOrders	Enum(5)	Defines whether OPG TIF orders are	
OI GOIUGIS	Litaiii(3)	enabled for the instruments.	
ATCOrdoro	Enur-(E)	1 Enabled (Default)	
ATCOrders	Enum(5)	Defines whether ATC TIF orders are	
		enabled for the instruments.	
		Value Meaning	
		0 Disabled	
ODVO.	(5)	1 Enabled (Default)	
CPXOrders	Enum(5)	Defines whether CPX TIF orders are	
		enabled for the instruments.	
		Value Meaning	
		0 Disabled	
		1 Enabled (Default)	
StatsUpdateonTradeAdjust	Enum(5)	Specifies whether trade cancels and	
		corrects will update all statistics mentioned	
		above or only the currently published	
		statistics.	
		Value Meaning	
		2 All	
		1 Limited (Default)	
		Specifies whether the instrument accepts or	
		rejects new orders during the CPP session	
NewOrdersDuringCPP	Enum(5)	Value Meaning	
		0 Disabled (Default)	
		1 Enabled	
Reserved2	Enum(5)	Linked to functionality that will be	
		introduced in a future release.	
Reserved3	Enum(5)	Linked to functionality that will be	
1100017000		Limbs to fanotionality that will be	

		introduced in a future release.	
Reserved4	Decimal (30,10)	Linked to functionality that will be introduced in a future release.	
Reserved5	Enum (5)	Linked to functionality that will be introduced in a future release.	
EHL Orders	Enum(5)	Defines whether EHL orders are enabled for the instruments. 0 - Disabled 1 - Enabled	
EHL Expiry Time	Integer(10)	Defines the duration (in seconds) an EHL order will sit in the order book after which it will automatically be expired by the System if unexecuted. e.g. 2	
GDX Orders	Enum (5)	Defines whether GDX orders are enabled for the instruments.  Value	
		0 – Disabled 1 – Enabled	
CPP Duration	Integer (2)	Specifies the duration of the CPP session.  Defined in minutes	
CPX Duration	Integer (2)	Defines the maximum duration of the CPX session. Defined in minutes	
Market Orders in Auction	Enum (5)	Determines whether market orders may participate in an auction.  Value	
		0-Disabled 1-Enabled	
Cross Orders	Enum (5)	Defines whether cross orders can be submitted or not.  Value	
		0 - Disabled 1 - Enabled	
CB Cross Policy	Enum (5)	Defines whether a cross order which breaches a Circuit Breaker should be accepted or rejected Value	
		0 – Accept  1 – Reject	
EOD Vol Auc Duration	Integer (2)	Duration of the Volume Auction Call session in minutes. If the value is 0 or null the session will not be triggered.	
Pegged Orders	Enum (5)	Defines if pegged orders are enabled or disabled for the instrument	

		Value 0 - Disabled 1 - Enabled	
GFX Policy	Enum (5)	Whether a GFX order may participate in multiple auctions. The field should support three values; None, Single Auction and Multiple Auctions.  Value  0 - Multiple Auctions  1 - Single Auction  2 - None	
Market Orders	Enum(5)	Defines if Market/Stop orders are enabled for Instruments attached with this Trading Parameter.  Value  0 - Disabled  1 - Enabled	
Ref Price Allowance (%)	Decimal (15,2)	Defines the allowance to be applied to the reference price (which is DRP/Previous Close/Reference Price of instrument) to validate cross orders.	

## 5.2.18 Sector Instrument

The Sector Instrument CSV file will be downloaded with the following layout

File name: SectorInstrument.csv

Field Name	DataType	Description
InstrumentID	varchar(9)	The unique JSE numeric identifier of the instrument.
Symbol	Varchar(25)	The unique JSE instrument alpha code of the instrument.
TradingSectorCode	Varchar(10)	The Trading Sector to which an instrument is allocated.
TradingSectorName	Varchar(30)	The human readable Sector Name.

## **5.2.19 Indices**

The Indices CSV file will be downloaded with the following layout

File name: Indices.csv

Field Name	DataType	Description	
IndexCode	Varchar(12) The unique JSE identifier of the index.		
IndexShortName	Varchar(30) The human readable short name of the Inde		
IndexLongName	Varchar(128)	/archar(128) The human readable long name of the Index	

# **5.2.20** This file is discontinued **Warrants Detail** this file is renamed and replaces the old Warrants Detail file!

The Warrants Detail CSV file will be downloaded with the following layout

File name: WarrantsDetail.csv

Field Name	Data Type	Description		
InstrumentID	Varchar(9)	The unique JSE numeric identifier of the instrument.		
Symbol	Varchar(25)	The unique JSE instrument alpha code of the instrument.		
StrikePrice	Decimal(18,9)	This field is the price payable by the warrant holder in		
		respect of each warrant on exercise of the warrant.		
ExpiryDate	Date	Date on which the warrant e	expires and the last day that the	
		holder can exercise his right.	Format will be YYYY/MM/DD.	
CoverRatio	Varchar(30)	The ratio, which determines the number of warrants required		
		to be exercised in relation to	the underlying securities.	
		e.g. 160:1, 40:1, 1:1		
WarrantStyleCode	Varchar(10)	The Warrant Style code for the Warrant Style that indicates		
		when the rights of the applica	able warrant can be exercised.	
		Warrant Style Code	Warrant Style Name	
		AC	American Call	
		AP	American Put	
		EC	European Call	
		EP	European Put	
		AX	American Combined	
		EX	European Combined	
		OT	Other	
UnderlyingTypeCode	Varchar(10)	The underlying type code for the underlying type. Example		
		Index, Instrument or other.		
		Underlying Type Code	Underlying Type Name	
		Instr	Instrument	
		Index	Index	
		Other	Other	
StopLoss	Decimal (18,9)	A Stop loss is the level of the underlying that, if reached, a		
		portion can be redeemable on termination of the warrant.		
		e.g. 20000, 40000, 0, etc.		
BarrierLevel	Decimal (18,9)	The Barrier Level is the level of the underlying that, if		
		reached, it will result in the warrant automatically terminating		
		with a zero value.		
		e.g. 20000, 40000, 0 etc.		
UnderlyingSecurity	Varchar(25)	The unique JSE instrument alpha code for the instrument,		
		company, bond, index or commodity, over which the warrant		
		is issued.		