ITaC

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<u>**ITaC INFORMATION GUIDE:**</u>

Introduction to the project

Programme Overview:

- The ITaC project is a **multi-year programme of work**, focussed on implementing new **Integrated Trading and Clearing** solutions. When complete, ITaC will bring about
  - Migration of all Derivative and Bond markets to the new Trading platform
  - Migration of all markets to a new Clearing platform
- ITaC is being delivered in a **phased approach**

Why are we doing it?

ITaC will bring about a host of benefits to the market:

GENERAL
- Aligned to global best practice   - Assists in complying with evolving regulatory standards   - State of the art technology   - Cross Market Surveillance   - Standard Open APIs   - Software Provider solutions simplified

POST-TRADE	**TRADING**
- Efficient asset utilisation (collateral) - Intra-day risk monitoring - Automation of Clearing Member balancing & EOD processes - Auditable billing - Improved MTM process - Improved margin transparency - Easier decomposition of margin processes	- Internationally accepted trading model and APIs - Enhanced market integrity & controls - Additional functionality - Improved Trade Reporting - Easier market making - Harmonised approach to DMA & OEA - Uniquely identify traders across markets

DATA	**FURTURE OPPORTUNITIES**
- Single copy of market data - Configurable gateways with more flexibility - Improved access to enhanced live and non-live data - Improved robustness of valuations system and operational processes - Reference Data standardisation	- Flexible efficient margin offset and cross market margin optimisation - Product innovation - One membership with authorisation by market - Clearing of all products – central risk management - One client account or member account across markets

What will ITaC achieve?

The implementation of ITaC will bring a host of changes to our Trading, Clearing and Market Data services, in an effort to align ourselves with international best practice and to ensure that we leverage the benefits of our new technology platforms.

The section below provides an overview of the changes being introduced to our various services, structured according to NEW FUNCTIONS vs. MODIFIED FUNCTIONS vs. DISCONTINUED FUNCTIONS

- Changes to the **TRADING** environment:

NEW FUNCTIONS	
Function:	Details:
Trade Reporting - Specific Trade Sub-types	More specific reporting functionality, special trade types not only one generic reported trade. Can identify activity better.
Pause Trading Session	Ability to Pause the Market allowing Order Management without matching occurring. Improved functionality from pure Halt status.
Intra-Day Trading Session Updates	Ability to change sessions intraday without needing to Halt Market. Potential for intraday Auctions exists.
Quotes	Easier Market-Making functionality.
Post Trade	Real-time, directly from exchange of all trade statuses. For both Clearing and Trading Members.
Reference data	Now available via csv files on the JSE IDP site.
Drop Copy	Real-time, directly from exchange of all order statuses. For both Clearing and Trading Members.
JSE Services Agreement (JSA)	All market participants to sign JSA prior to using test or production services.

MODIFIED FUNCTIONS	
Function:	Details:
Order Types and Time Enforcers	More options for order types and ability to allow orders to live for more than one day.
On Book Trading	Enhancement of Stop and Stop Limit orders and the TIF (Time in Force) additions allowing more flexibility.
Off Book Trading	More specific Off Book trade reporting functionality with special trade types
Option Instruments	Dynamic Intraday auto-generation of option Strikes to follow Market Movements.
Logging on	Dealers log on to in-house front ends and connectivity is established between exchange and the firm.
Volatility Auctions	Dynamic and Static circuit breakers trigger Volatility Auctions
Latency	Improved and consistent Latency (for low latency trading).
Trade Cancellation and Corrections	Same Day Trade cancellations
Authentication and access management	Authentication and access management managed via in-house front ends
Market data	Real time statistics and full market depth as well as top of book published real-time

DISCONTINUED FUNCTIONS	
Function:	Details:
Front-ends	JSE will no longer provide trading and deal management front-ends (Nutron).
Price band limits	Price band limits for On Book central order book trading for EDM will no longer apply
Dividend Future	Dividend Future will no longer exist in EDM as the Dividend Neutral contract will now be "one" contract and the Journal transaction will be processed on this contract

- Changes to the **CLEARING** environment:

NEW FUNCTIONS	
Function:	**Details:**
Intra-day Risk Monitoring	New real-time service for monitoring and setting exposure limits.
Deal Management	New service fees functionality to replace "Take-a-Turn" and agency trades.
Securities and FX Collateral	New service that allows trading members and clients to pledge securities and FX as collateral – *NOTE: will form part of a post-go-live release.*
Interfaces, connectivity and bandwidth	New technical interfaces. Connectivity to JSE DR site required when JSE invokes DR site.
Data Agreements	Market participants to sign data agreements to receive certain statistical information.
JSE Services Agreement (JSA)	All market participants to sign JSA prior to using JSE testing (CTS) or production services.

MODIFIED FUNCTIONS	
Function:	**Details:**
Pre-Trade Risk	Changes to pre-trade controls.
Margining Methodology	Minor changes to current JSPAN methodology. Intentions to move to HistVaR methodology in future.
Trade Entry	Non-validation of accounts on trading system. Price bands.
Reference Data	Changes to Members Codes / Sub accounts / Instruments codes and fields / Dividend neutral.
EoD Process	Single EoD run across all markets. Two-step CM balancing process.
BDA Integration	To include information of pledged securities collateral when implemented.
Global Markets	Remain on Nutron as it is on Commodity Derivatives
JSE Rules and Directives	Changes to JSE derivatives rules and directives in relation to new and removed services.

DISCONTINUED FUNCTIONS	
Function:	**Details:**
Front-ends	JSE will no longer provide trading and deal management front-ends.

- Changes to the **MARKET DATA** environment – <u>specifically LIVE Market Data</u>:

NEW FUNCTIONS	
Function:	**Details:**
Market Data via RTC	A subset of Public Market Data will be made available via Real Time Clearing (RTC) EMAPI to support operational needs of Clearing Members subject to signed JSA and JDA.
Full Market Depth	Full depth order book feed available (Also referred to as L2 feed)
Top of Order Book	Best Bid and Ask feed available. (Also referred to as L1 feed)
Market Data to the International Access Point	Replaced with new EDM feeds. Introduction of new FX feeds. (Commodities Derivatives data feed remains unchanged)
Instrument Identification	Introduction of ISINs and Instrument ID. Further details of Instrument contained in Start of Day file on IDP FTP server.

MODIFIED FUNCTIONS	
Function:	**Details:**
Indicative Auction Information	Real time update on Uncrossing Price and Volume
Multicast Protocol	Market data now available via Multicast Protocol versus point to point dissemination.

DISCONTINUED FUNCTIONS	
Function:	**Details:**
Provision of Non-Live Data	No provision of Non-Live Data via Live Data Feeds

- Changes to the **MARKET DATA** environment – <u>specifically NON-LIVE Market Data</u>:

NEW FUNCTIONS	
Function:	Details:
New Data Records for FXM	FXM data will be provided in a new separate set of Data Records
Web Reports and Data Products Integration	Web Reports and Data Records integrated to form new sets of Data Records and Web Reports
Web Reports format and structure	Web Reports will be exact copies of corresponding Data Records
Market Identifier Code (MIC)	MIC codes are the universal identifier codes available as part of the reference data downloads for JSE FXM and JSE EDM markets.

MODIFIED FUNCTIONS	
Function:	Details:
Changes to EDM Data Records	New and changed Data Records. Some Data Records discontinued.
Provision of Reports on JSE Website	A subset of the Data Records will be made available later in the night as PDF based Web Reports for General Public Viewing
IRC Data Records continues	Interest Rate Derivatives Data Records will continue to be provided but with FX data removed