



Integrated Trading & Clearing (ITaC)

Market Data Overview

May 2017

Project 1b (Equity Derivatives Market) & ITaC Project 1c (Currency Derivatives Market)

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Objective



Material changes to the **Public Market Data** will take place. Not only to the type of data, but also the format and structures, as well as the way that the data will be made available.

This session is relevant to all parties that have an interest in the Public Market Data that will be made available in support of the Equity Derivatives and Currency Derivatives markets

Public Market Data is defined as market data (reference, pricing and other trade related data) that does not contain information that is confidential to a specific party.



Public Market Data covers both **Live** and **Non-Live Data**

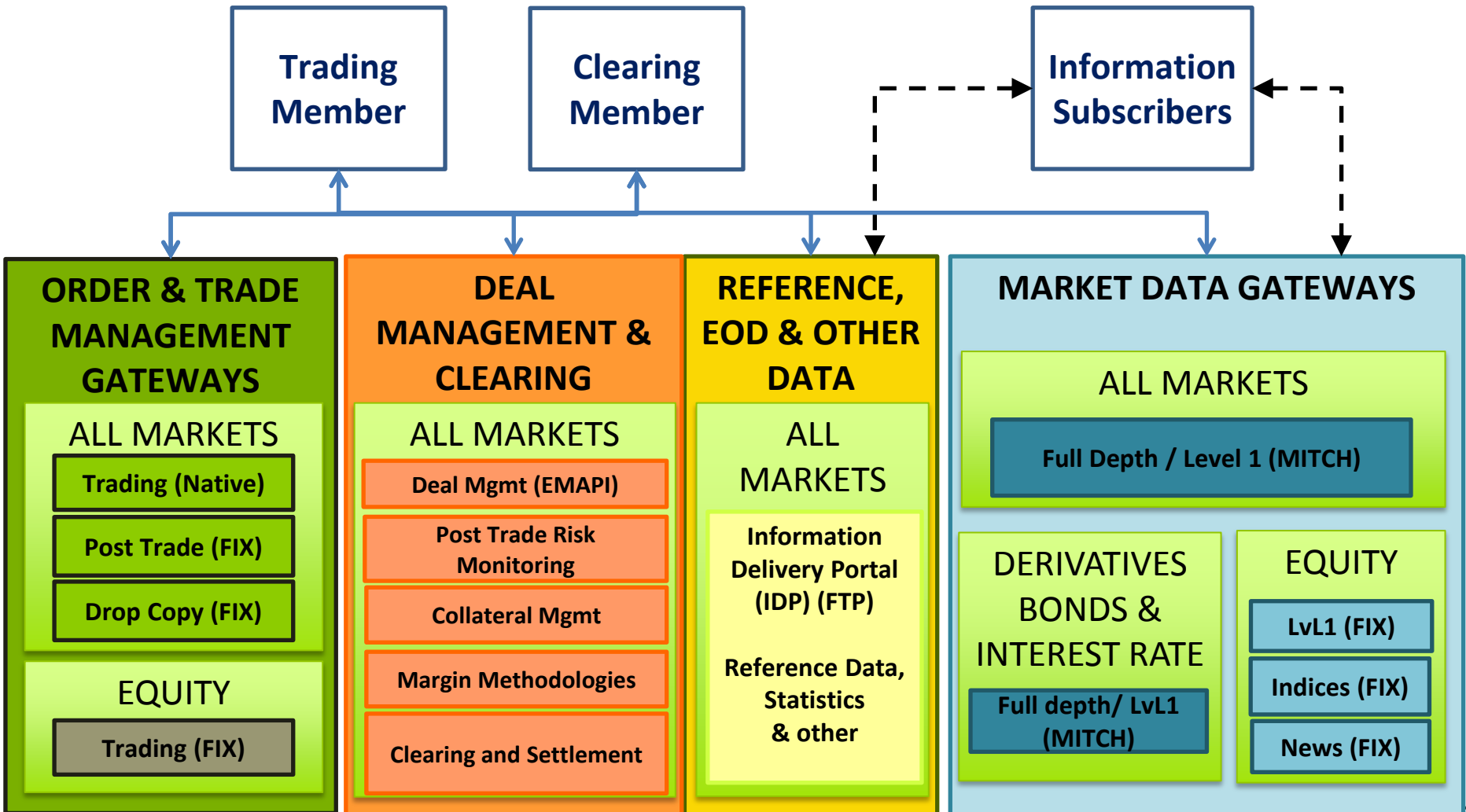
Live Market Data is data that is typically disseminated in a continuous manner (streaming) during the day.

Non-Live Market Data is data that is not Live Market Data. Non-Live data is typically produced at point in time during and after the trading day.

Delayed and **Historical** data are also classified as Non-Live Data.

High Level Architectural Overview

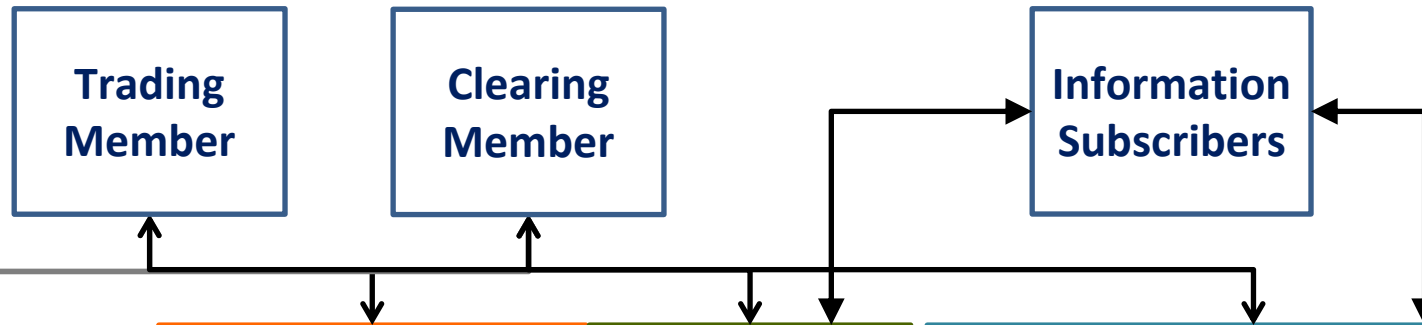
JS



High Level Architectural Overview

Market Data Focus

JS



ORDER & TRADE MANAGEMENT GATEWAYS

ALL MARKETS

Trading (Native)

Post Trade (FIX)

Drop Copy (FIX)

EQUITY

Trading (FIX)

DEAL MANAGEMENT & CLEARING

ALL MARKETS

Deal Mgmt (EMAPI)

Post Trade Risk Monitoring

Collateral Mgmt

Margin Methodologies

Clearing and Settlement

REFERENCE, EOD & OTHER DATA

ALL MARKETS

Information Delivery Portal (IDP) (FTP)

Reference Data, Statistics & other

MARKET DATA GATEWAYS

ALL MARKETS

Full Depth / Level 1 (MITCH)

DERIVATIVES BONDS & INTEREST RATE

Full depth/ LvL1 (MITCH)

EQUITY

LvL1 (FIX)

Indices (FIX)

News (FIX)

JS

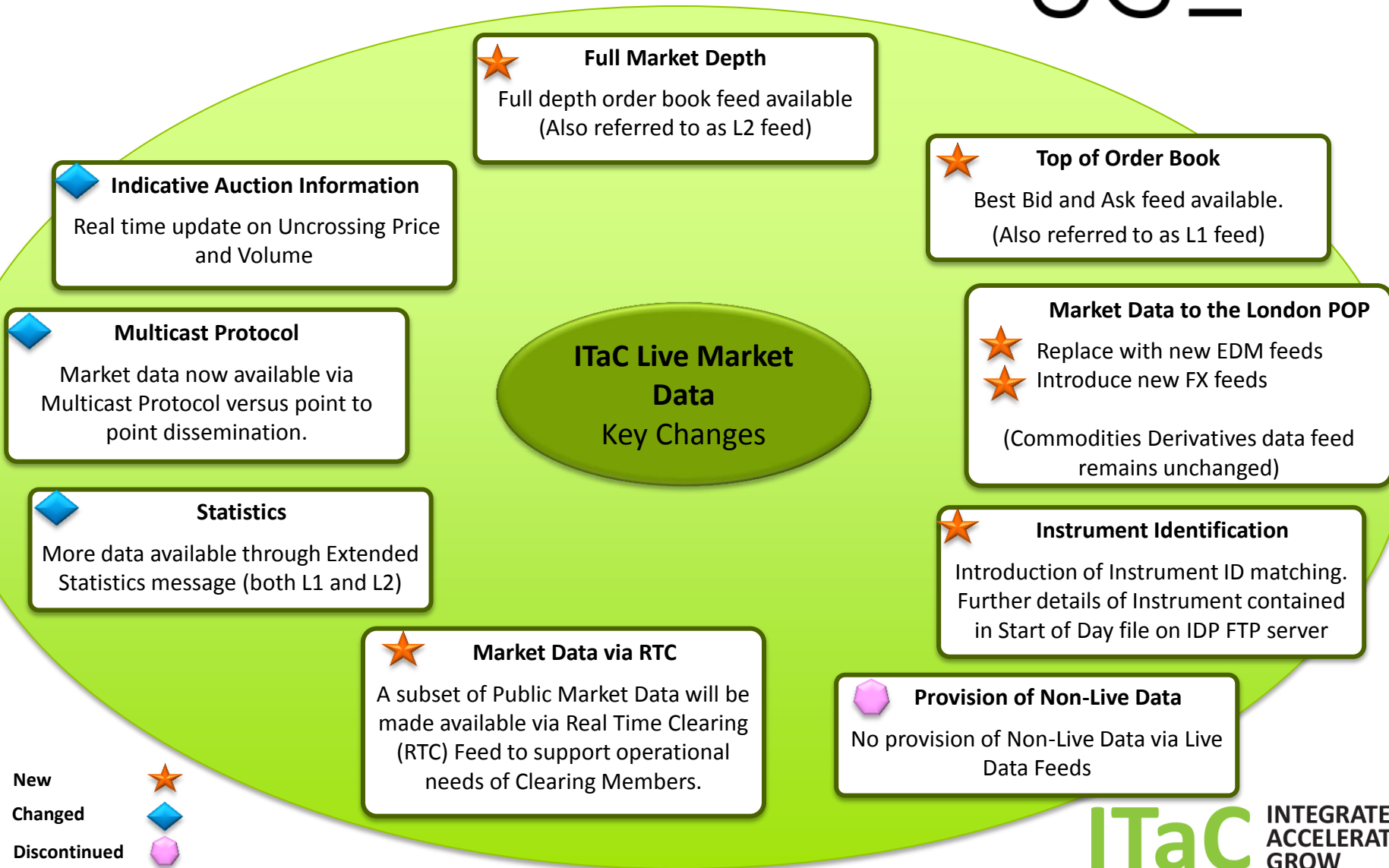
Changes to Live Data



Changes to Live Data

Overview

JS



Changes to Live Data

Detail



Changes to Live Data

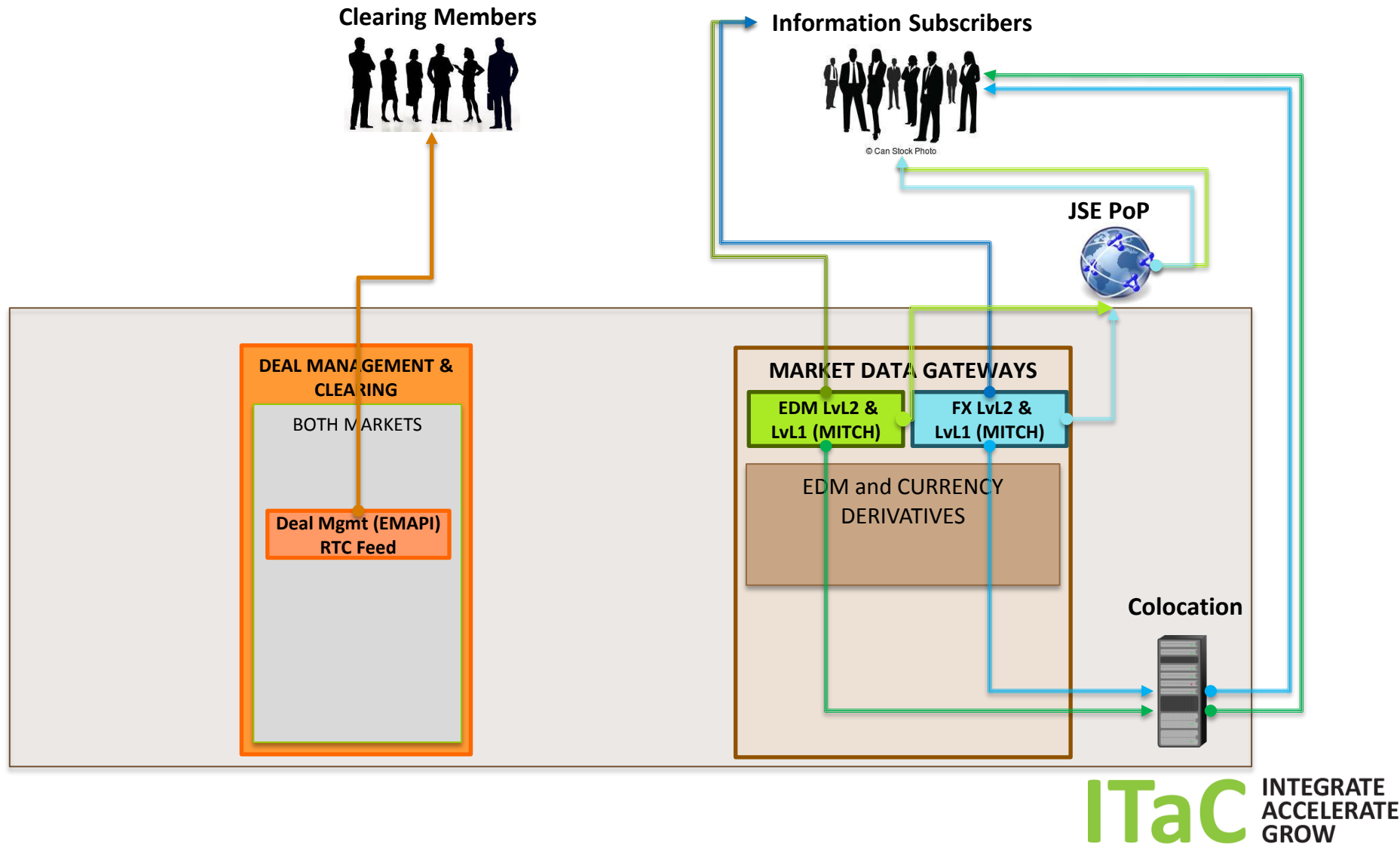
- Two types of MITCH based Live Data Feeds per market
 - **Full Depth (L2)** Data Feed – Throttled and Unthrottled
 - **Top (L1)** of Book Data Feed
- Both feed types will include Extended Statistics
- The Extended Statistics message also includes three key Derivatives data values (**Open Interest, Notional Exposure and Notional Delta Exposure**)
- Non-Live Data will not be made available via the Live Data feeds
- Subset of Public Market Data made available via RTC Feed is to support the operational functioning of Clearing Members. Any other use of this Public Market Data will be need to be licensed separately. *Refer to the Volume PT02 – Post-trade EMAPI Clearing for further information*

Changes to PoP Service

- Replacement of the current EDM Data feed (JSE Derivatives Market format) with the two new MITCH EDM Data feeds
- Introduction of the two new MITCH FX Data Feeds.
- All new data feeds will be Multicast MITCH format.
- The existing Commodities data feed will continue unchanged.

Changes to Live Data Ecosystem View

JS



Changes to Live Data

AS-IS to TO-BE

JSE

Current EDM Live Feeds		New/Changed EDM Live Feeds		New/Changed FX Live Feeds		Current FX Live Feeds	
Depth of 9 Snapshot feed		Full Depth (L2) Tick by Tick Live Data Feed (Throttled)	★	Full Depth (L2) Tick by Tick Live Data Feed (Throttled)	★	Depth of 10 Snapshot feed	
		Full Depth (L2) Tick by Tick Live Data Feed (Unthrottled)	★	Full Depth (L2) Tick by Tick Live Data Feed (UnThrottled)	★		
		Top of Book (L1) Live Data Feed	★	Top of Book (L1) Live Data Feed	★		
Live Snapshot Data Feed available in DITCH format via JSE PoP		Full Depth (L2) Tick by Tick Live Data Feed (Throttled) via POP Solution	★	Full Depth (L2) Tick by Tick Live Data Feed (throttled) via Pop Solution	★	No FX live data available via PoP Solution	
		Full Depth (L2) Tick by Tick Live Data Feed (Unthrottled) via Pop Solution	★	Full Depth (L2) Tick by Tick Live Data Feed (Unthrottled) via Pop Solution	★		
Non-Live Data available for download via Live Feed via special messages (Download message 36, Mark to Market Rates (123), Daily Rates (124) and Early Valuations (127))		Non-Live data not available via live Feeds	✳	Non-Live data not available via live Feeds	✳	Non-Live Data available for download via Live Feed via special messages	

New



Changed



Discontinued



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GROW

JS

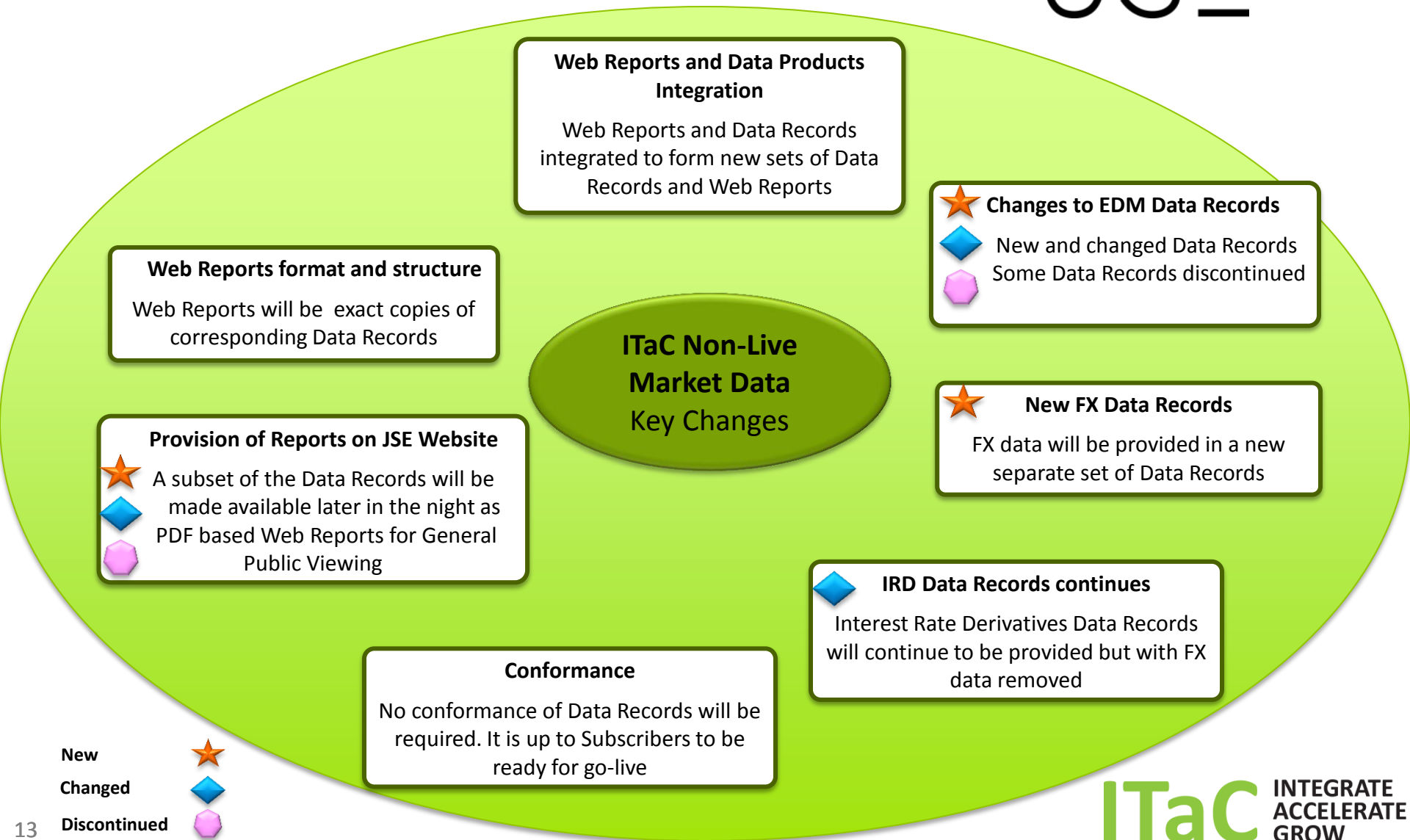
Changes to Non-Live Data



Changes to Non-Live Data

Overview

JSE



Changes to Non-Live Data

Detail



Changes to Data Records

- FX data will move from being provided via IRC Data Records to new set of FX Data Records
- IR Derivatives data will continue to be provided via existing IRD Data Records
- **16 EDM Data Records** will be made available
- **2 current EDM Data Records** will be discontinued
- **13 FX Data Records** will be made available

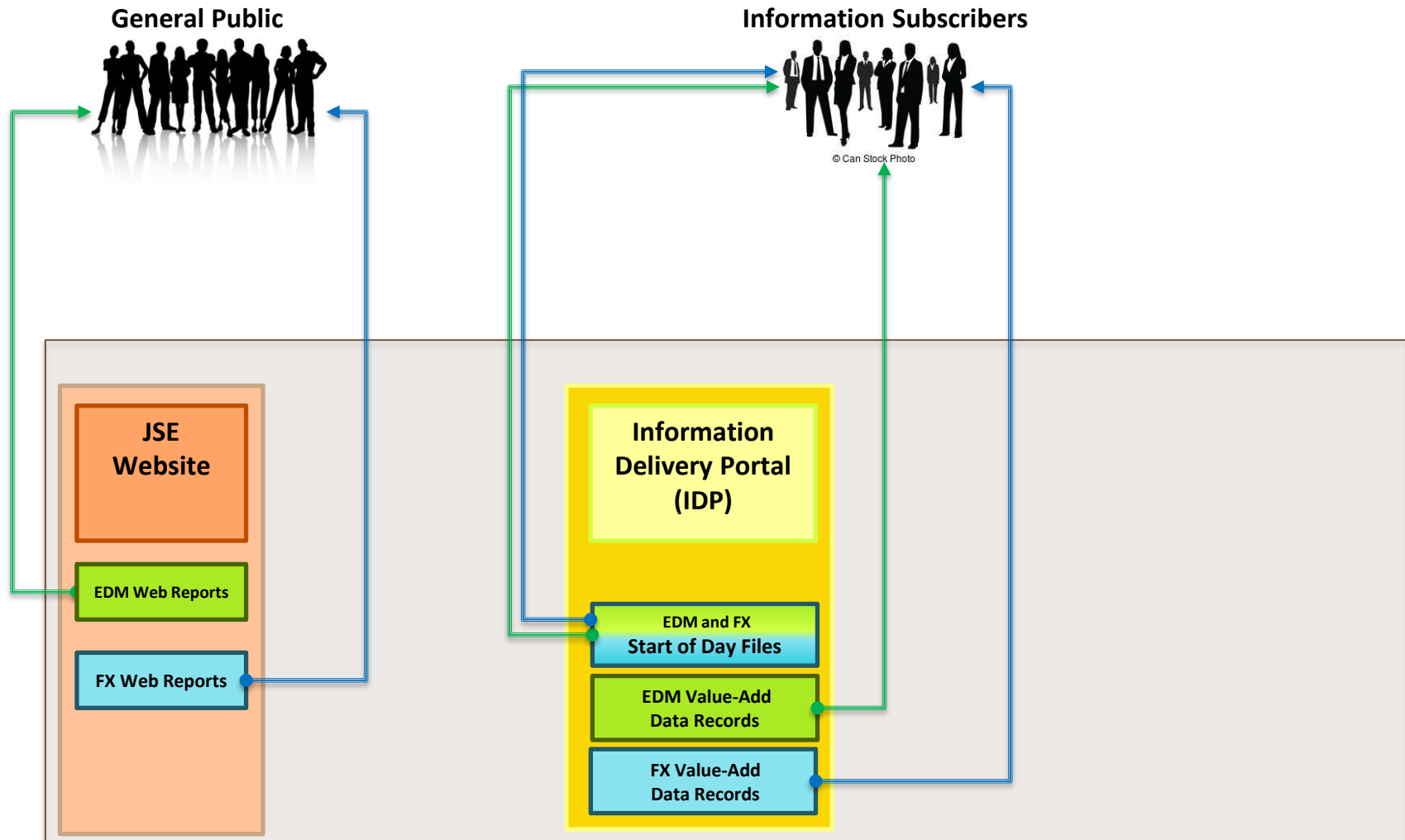
Changes to Web Reports

- A set of Web Reports will continue to be published on JSE website for General Public viewing
- Web reports will be provided in PDF form and most will be provided at midnight
- Web Reports will have same fields and same fields sequence as corresponding Data Records
- **10 EDM Web reports** will be provided
- **5 current EDM Web Reports** will be discontinued
- **9 FX Web Reports** will be provided
- **5 current FX Web Reports** will be discontinued

Changes to Non-Live Data

Ecosystem View















JSE



Changes to Non-Live Data

AS-IS to TO-Be - Equity Derivatives

JS

Current Data Records		New/Changed Web Reports	
New/Changed Data Records		Current Web Reports	
Daily Traded Statistics - DED (D - 19:30)	Daily Traded Statistics - DED (D - 20:30) 		EDM Daily Stats (D - 19:30) 
Daily Full Market Type Totals - SED (D - 19:30)	Daily Full Market Type Totals - SED (D - 20:30) 		
Daily Full Market Overall Totals - OED (D - 19:30)	Daily Full Market Overall Totals - OED (D - 20:30) 		
Daily Full Market Statistics - DED (D - 19:30)	Market Statistics - DED (D - 20:30) 		
Interest Rates - RED (D - 19:30)	South African Rates (D - 10:00, 11:00 and 20:30) 	South African Rates (D - 10:00 and 11:00) 	JIBAR Rates (D - 10:00 & 11:00)
Mark to Market - MED (D - 19:30)	MTM All - MED (D - 20:30) 	MTM All (D - midnight) 	MTM All Report (D - 17:00)
Daily Traded Type Totals - SED (D - 19:30) 			
Daily Traded Overall Totals - OED (D - 19:30) 			
	Monthly Market Statistics - DED (M - 20:30) 	Monthly Market Statistics (M - midnight) 	EDM Monthly Market Statistics (M - 19:30)
	Weekly Full Market Statistics - DED (W - 20:30) 		

New
Changed
Discontinued



D - Daily, W - Weekly, F/N - Fortnightly, M - Monthly, Q - Quarterly

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Changes to Non-Live Data

AS-IS to TO-Be - Equity Derivatives



Current Data Records		New/Changed Data Records		New/Changed Web Reports		Current Web Reports	
		Early MTM - MED (D - 15:30)	★			MTM Fair Report (D - 15:30)	✳
		Margin Requirements - IED (F/N - 20:30)	★	Margin Requirements (F/N - midnight)	◆	Margin Requirements (F/N - 19:30)	
		Close Out Prices - CED (Q - 12:00)	★	Close Out Prices (Q - midnight)	◆	Close Out Prices (Q - 12:00)	
		Dividends - IED (D - 17:00)	★	Dividends (D - midnight)	◆	Dividends (D - 17:00)	
		Volatility Surfaces - LED (F/N - 15:30 and 17:30)	★	Volatility Surfaces (F/N - midnight)	◆	Volatility Skew Indices (F/N - 19:30)	
		All Contract Details - AED (D - 20:30)	★	All Contract Details (D - midnight)	◆	All Contract Details (D - 19:30)	
		Options Daily Traded - PED (D - 20:30)	★	Options Daily Traded (D - midnight)	◆	Options Daily Traded (D - 19:30)	
		Risk Parameters - ADD (D - 20:30)	★	Risk Parameters (D - midnight)	◆	Risk Parameters (D - 19:30)	
						Anchor Volatility (D - 16:00)	✳
						Volatility Skew Transpose (D - 16:00)	✳
						Volatility Skew SSF (D - 16:00)	✳

New



Changed



Discontinued















D - Daily, W - Weekly, F/N - Fortnightly, M - Monthly, Q - Quarterly

Changes to Non-Live Data

AS-IS to TO-Be - Currency Derivatives

JS

Current Data Records		New/Changed Web Reports	
Daily Traded Statistics - DIR (D - 19:30)	Daily Traded Statistics – DCD (D – 20:30) 		
Daily Full Market Type Totals – SIR (D - 19:30)	Daily Full Market Type Totals – SCD (D – 20:30) 		
Daily Full Market Overall Totals – OIR (D - 19:30)	Daily Full Market Overall Totals – OCD (D – 20:30) 		
Daily Traded Type Totals – SIR (D - 19:30) 			
Daily Traded Overall Totals – OIR (D - 19:30) 			
Mark to Market – MIR (D - 19:30)	MTM All - Record Type MCD (D – 17:00) 	MTM All (D – 17:00) 	5PM Daily Mark to Market (D – 17:00)
	Early MTM – MCD (D – 15:00) 		3PM Currency Derivatives MTM (D - 15:30) 
	Risk Parameters – ACD (D 20:30) 	Risk Parameters (D – midnight) 	Risk Array (D – 19:30)
	Daily Market Statistics – MCD (D – 20:30) 	Daily Market Statistics (D – midnight) 	YieldX Daily Stats (D – 19:30)
	Weekly Market Statistics – MCD (W – 20:30) 	Weekly Market Statistics (W – midnight) 	Weekly Market Statistics (W – 19:30)

New
Changed
Discontinued



D – Daily, W – Weekly, F/N – Fortnightly, M – Monthly, Q – Quarterly

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Changes to Non-Live Data

AS-IS to TO-Be - Currency Derivatives

JS

Current Data Records		New/Changed Data Records		New/Changed Web Reports		Current Web Reports	
		(M – 20:30) Monthly Market Statistics – MCD	★	Monthly Market Statistics (M – midnight)	◆	Monthly Market Statistics (M – 19:30)	
		Margin Requirements – ICD (F/N – 20:30)	★	Margin Requirements (F/N – midnight)	◆	Margin Requirements (F/N – 19:30)	
		Rand Spot – CCD (D - 10:00 & 16:00)	★	Rand Spot (D - midnight)	◆	Rand Spot (D – 10:00 & 17:00)	
		Close Out Prices - CCD (Q - 12:00)	★	Close Out Prices (Q - midnight)	◆	Close out prices (Q - 12:00)	
		South African Rates – RCD (D - 10:00, 11:00 and 20:30)	★	South African Rates (D - 10:00 & 11:00)	◆	JIBAR Rates (D – 10:00 & 11:00)	
						Daily Turnover Summary (D – 18:00)	✿
						Daily Detailed Turnover (D – 18:00)	✿
						HiLo (D: 18:00)	✿
						MTM YieldX (D – 15:30)	✿

New
Changed
Discontinued



D – Daily, W – Weekly, F/N – Fortnightly, M – Monthly, Q – Quarterly

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Changes to Non-Live Data

AS-IS to TO-Be - Detailed Change Impact Analysis



An AS-IS to TO-BE Change Impact Analysis document (Excel) has been created for the convenience of Information Subscribers.

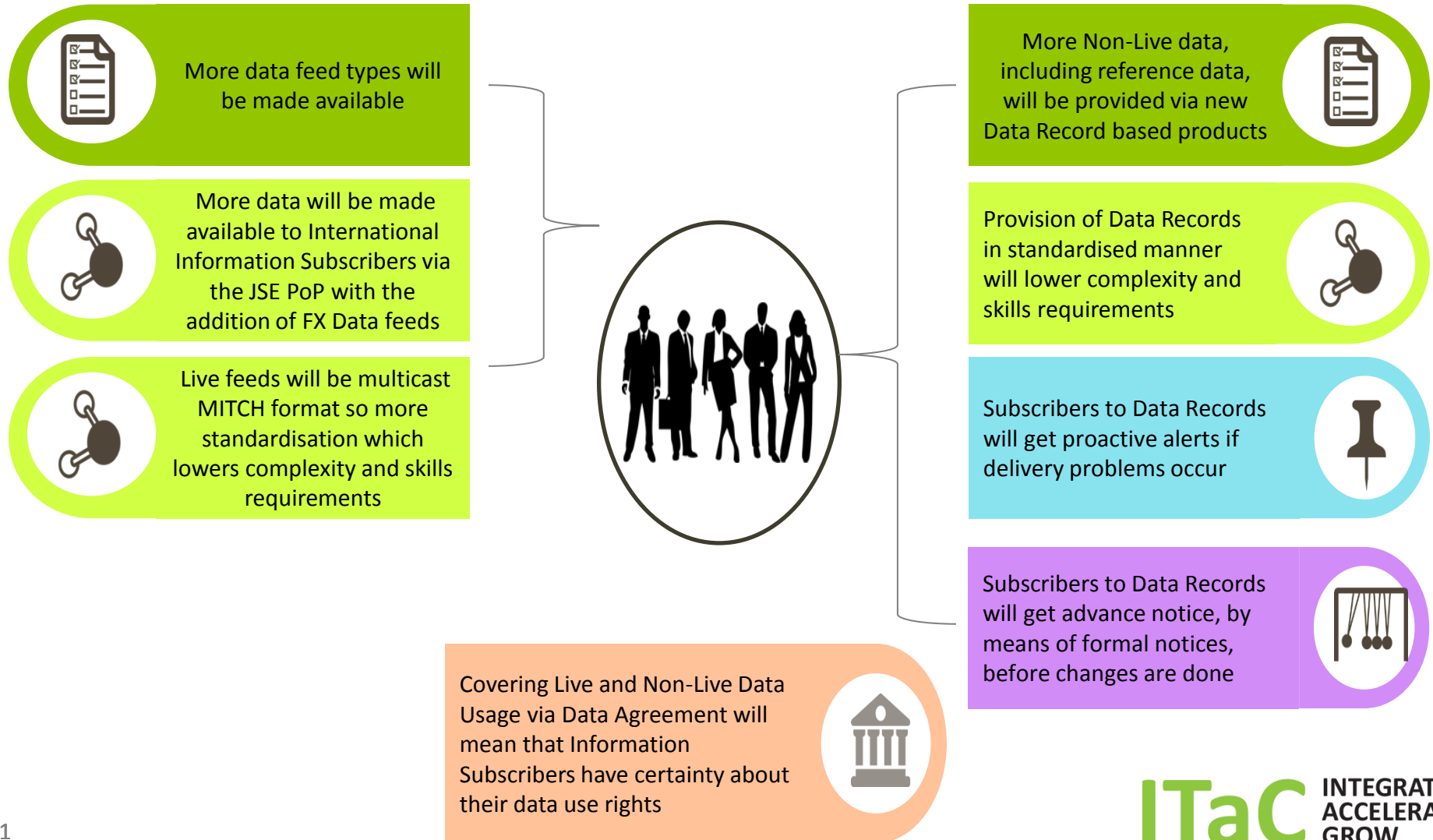
It maps out, in more detail, the changes to the Data records and Web reports.

Also included is a data field location matrix that lists each data element and indicating in which Data Records that will be made available and indicating the data record(s) where the data element is included.

Non-Live Market Data Products Change Impact Analysis

Summary of Key Value Points

JSE



Legal and Commercials



All Information Subscribers to the Live and Non-Live Data Products will be required to sign the JSE Data Agreement (JDA) which will stipulate the terms and conditions governing access and use of the Public Market Data

The subset of Public Market Data made available via RTC will also be covered by the data agreement so Clearing Members are also required to sign the JDA. Most Clearing members have already signed the JDA.

Information Subscribers that have already signed the JDA will just need to sign new/revised schedules

The data agreement must be completed and signed before go-live

To account for the cost in producing and supporting the Live and Non-Live Data Products, and taking into consideration the perceived value of the data, the JSE has is conducting a review to decide on the appropriate data fees which will be based on the different uses of the data

The applicable data fees will be communicated once the review exercise is complete so that Information Subscribers can make informed Data Product subscription decisions

Steps in the ITaC Journey



Reference Documentation



Category	Document Name	Location
Live Market Data Specifications	Volume 05 – Market Data Gateway (MITCH – UDP)	https://www.jse.co.za/services/itac (under Trading Documentation)
Non-Live Market Data Products	Equity Derivatives Non-Live Data Products Specifications	https://www.jse.co.za/services/itac (under Non-Live Market Data Products)
	Currency Derivatives Non-Live Data Products Specifications	https://www.jse.co.za/services/itac (under Non-Live Market Data Products)
	Non-Live Market Data Change Impact Analysis	https://www.jse.co.za/services/itac (under Non-Live Market Data Products)
	Sample Test Data files for Equity Derivative and Currency Derivative Markets	https://www.jse.co.za/services/itac (under Non-Live Market Data Products)
Public Market Data available via RTC Feed	Volume PT02 – Post-trade EMAPI Clearing	https://www.jse.co.za/services/itac (under Post-trade Documentation)
Presentations	ITaC Market Data Working Group Presentation	https://www.jse.co.za/services/itac under ITAC presentations)

Questions?

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Need help?



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