

# **Integrated Trading and Clearing (ITaC) Working Group Session**

8 July 2015



# Agenda

---

JSΞ

- Trading Firm Structure
- Trading Drop Copy Functionality
- Collateral Management
- Questions

# 2015 Working Group (WG) Schedule



- Proposed 2015 WG Schedule

Date	Time	Status
Tues, 12 May 2015	11h00 – 13h00 SAST	Complete
Mon, 18 May 2015	10h00 – 12h00 SAST	Complete
Thurs, 28 May 2015	10h00 – 12h00 SAST	Combined into 3 June
Wed, 3 June 2015	10h00 – 12h00 SAST	Complete
Wed, 1 July 2015	10h00 – 12h00 SAST	Combine with/into 8 July
Wed, 8 July 2015	10h00 – 12h00 SAST	In Progress
Wed, 15 July 2015	10h00 – 12h00 SAST	
Wed, 5 Aug 2015	10h00 – 12h00 SAST	
Mon, 24 Aug 2015	11h00 – 13h00 SAST	<b>*New date added</b>
Mon, 21 Sept 2015	10h00 – 12h00 SAST	
Mon, 19 Oct 2015	10h00 – 12h00 SAST	<b>Likely to add more dates</b>
Wed, 18 Nov 2015	10h00 – 12h00 SAST	

# Proposed ITaC phases

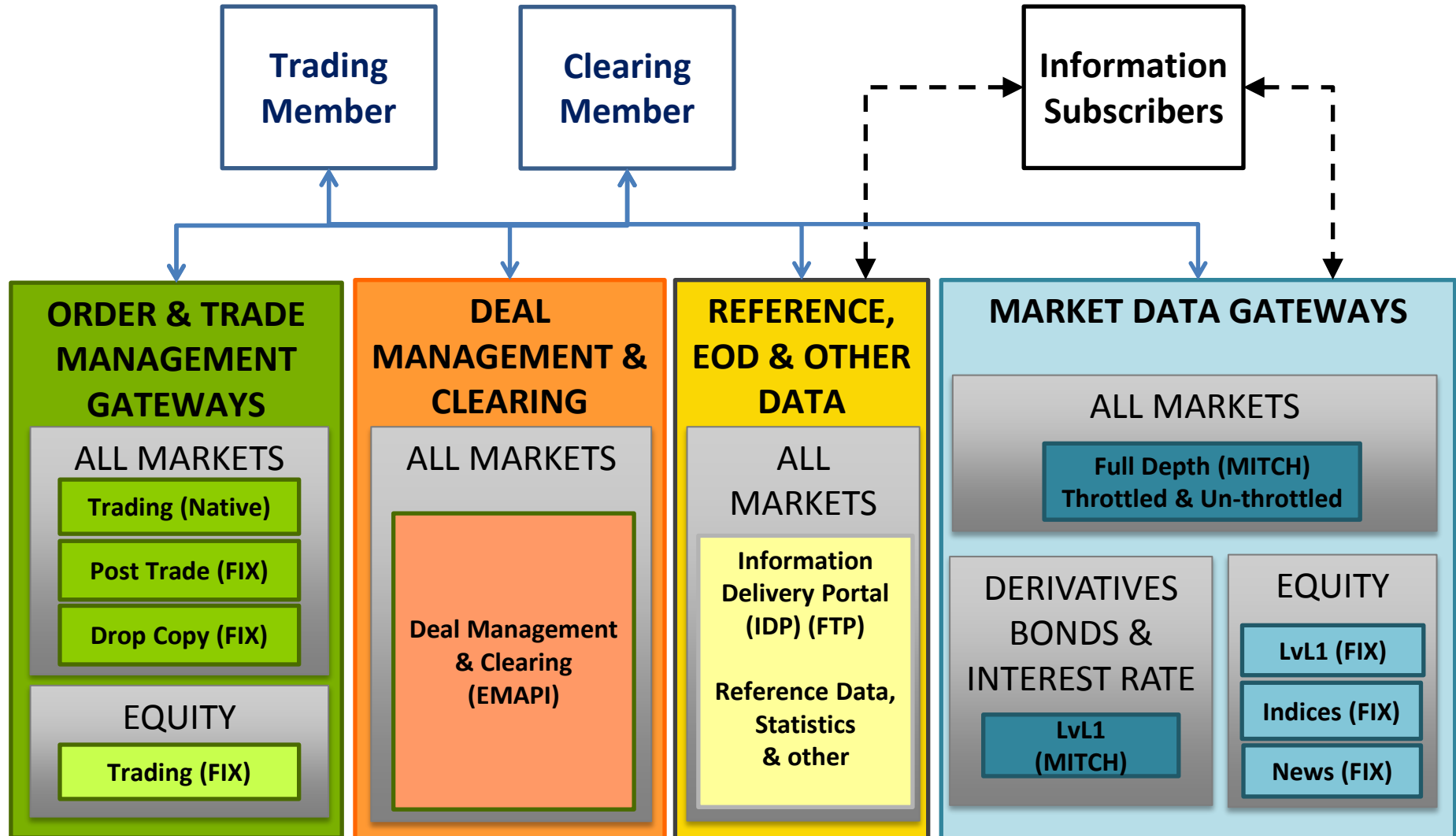


- The programme consists of 2 Projects
  - Project 1:
    - Phase 1a: Equity Market upgrade for trading only
      - Targeting Q3 2016 (dependent on T+3 implementation)
    - Phase 1b: Equity Derivatives Market
      - Targeting Q2/3 2017
    - Phase 1c: Currency Derivatives Market
      - Targeting 2 months after Phase 1b implementation
  - Project 2: Commodity Derivatives Market, Interest Rate Derivatives and Bonds Markets



# Trading, Clearing and Information Systems

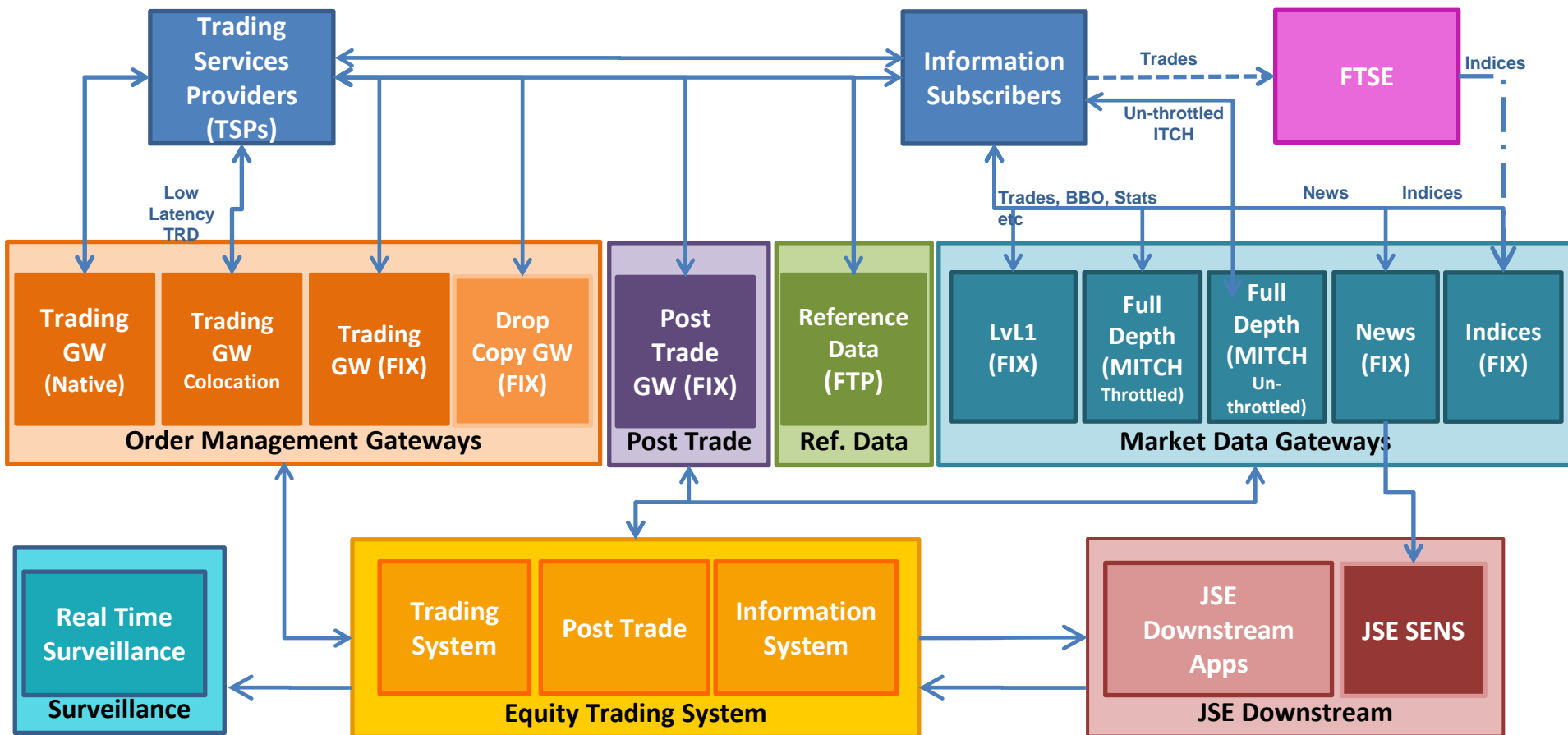
All Markets – High-level



**NOTE:** Interest Rate and Commodity Derivatives form part of the future roadmap and will follow post Project 1

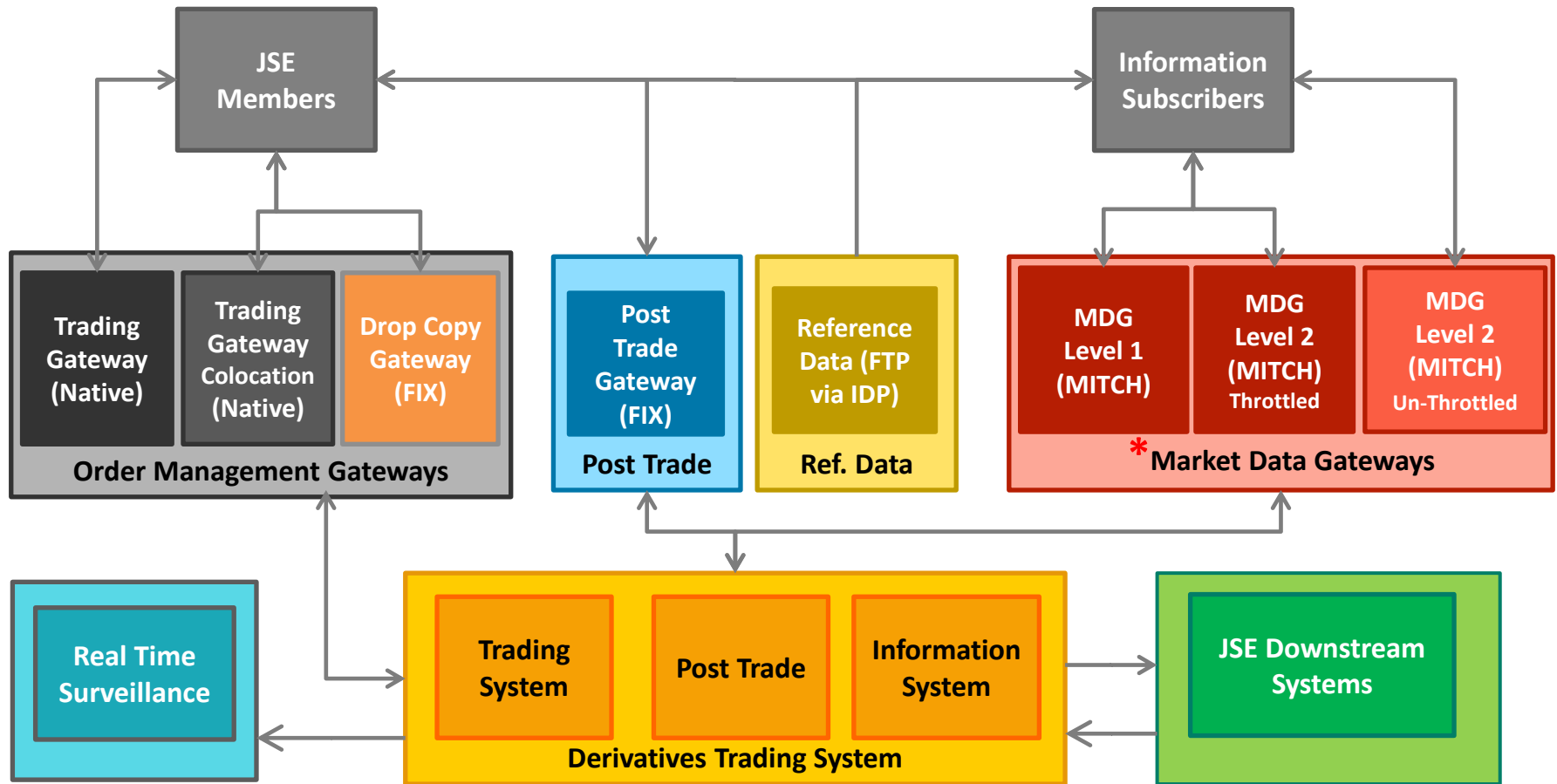
# Trading and Information System

## Current Equity Market



# Trading and Information Systems

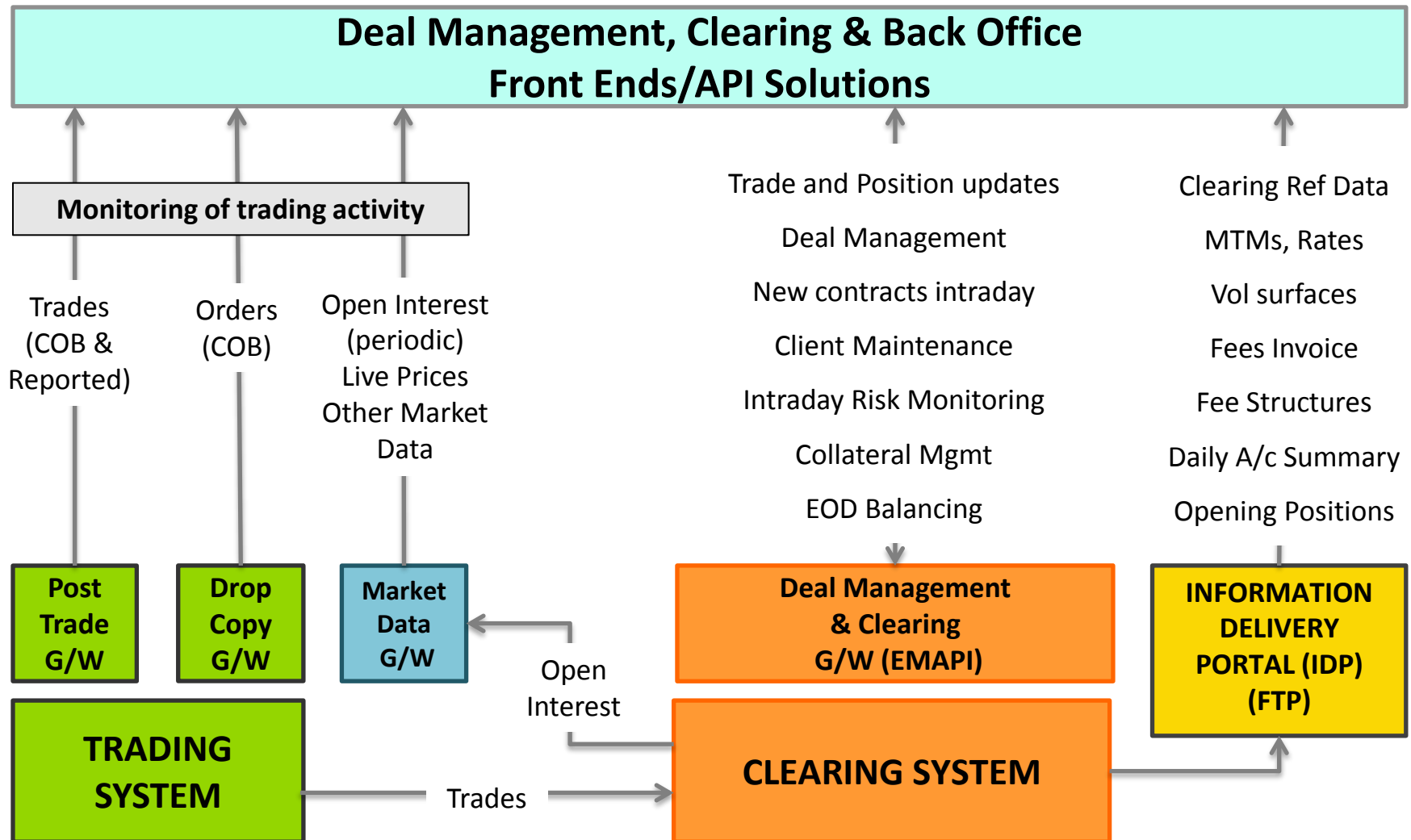
## High Level Proposed Derivatives Solution



- There will be a set of Market Data Gateways for Equity Derivatives and a set of Gateways for Currency Derivatives
- \* Additional market data gateways will be introduced at a later stage for Commodity Derivatives.
- Interest Rate market data will be disseminated via the same gateways as Currency Derivatives

# Interfaces for Post Trade Functions

## High Level Proposed Solution





# **Integrated Trading and Clearing (ITaC)**

Trading



JS 三

# Functional Overview

## Trading and Market Data



Activity	Equity	Equity Deriv.	Currency Deriv.	Description
Trading Gateway (Native)	Y	Y	Y	Order Management of new and existing orders or order cancels with immediate confirmation of On Book (automated) trades and publishing of Execution Reports. Trade Cancellations and Market Operations announcements.
Trading Gateway (FIX)	Y	N	N	
Drop Copy Gateway (FIX)	Y	Y	Y	Allow for the receipt of additional copies of the Execution Reports generated by the system, 'Copy To' functionality. This interface may also be used by clients to download the current status of all their active orders in the event of a failure.
Post Trade Gateway (FIX)	Y	Y	Y	Enables member firms to submit and manage Off Book trade reports and receive real-time information on On Book executed trades. This interface may also be used by clients to download all their confirmed trades in the event of a failure.
Market Data Gateways (MITCH)	Y	Y	Y	Provides real-time market data of instruments traded on the JSE such as price, volume, closing prices auction information, instrument status etc. A Level 1 and Level 2 (full market depth) service will be available.
Reference Data (FTP)	Y	Y	Y	Static trading reference data for the Trading System will be made available on a daily basis via the JSE IDP (FTP) service.

# Agenda

---



- High Level Proposed Solution
- Firm Structure
- Trader Groups
- Interface Users
- Drop Copy Functionality
  - Logical Flow
  - Permission Tables
- Trade Copy Functionality
  - Logical Flow
  - Permission Tables
- ComplID Naming Convention
- Topics for Discussion

# Firm Structure

## Summary

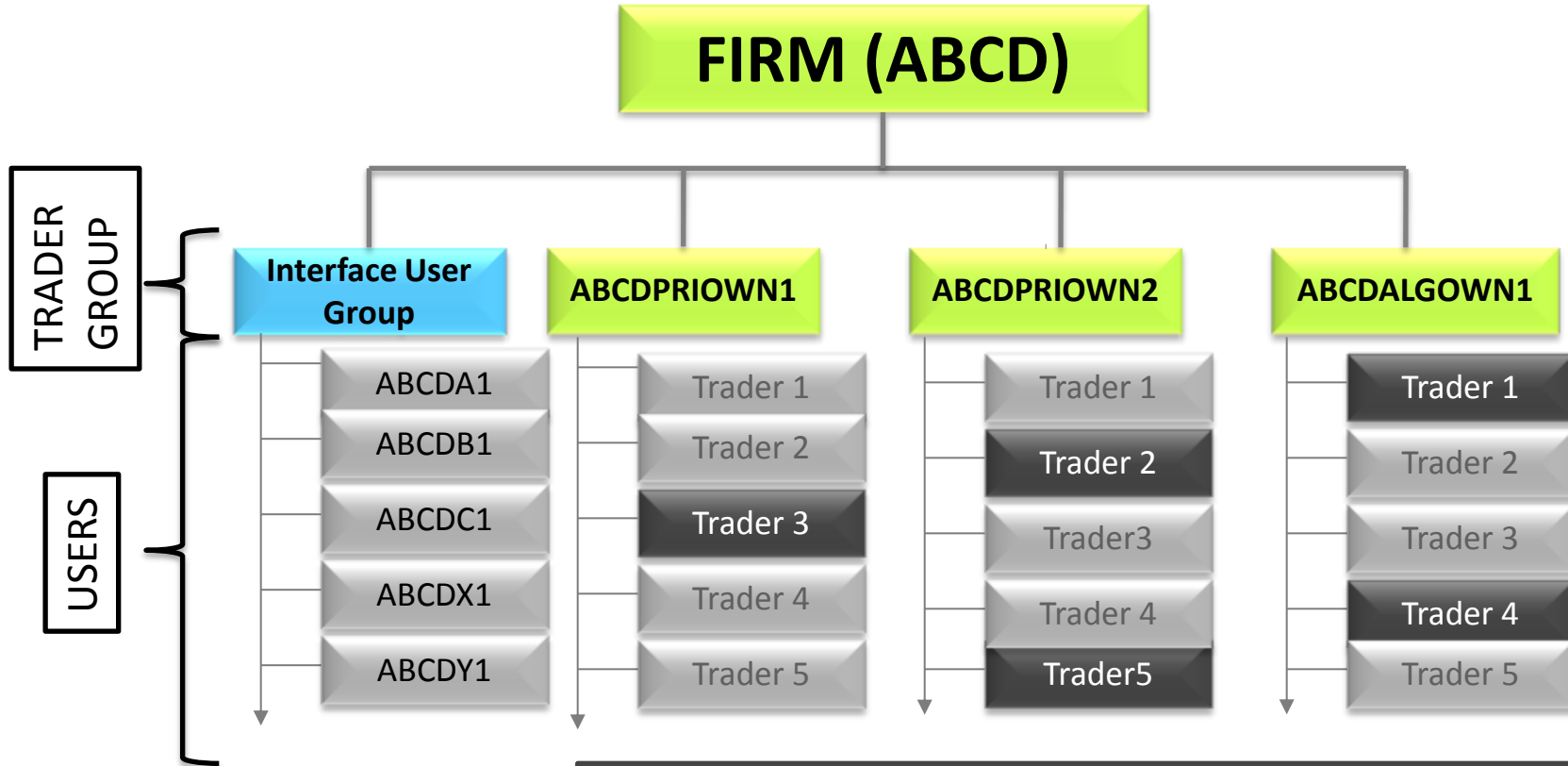
---



- Firm
  - Consists of both Trading Members (TM) and Clearing Members (CM) and Market Data subscribers
- Trader Groups are a logical grouping of **Users**
- Users are
  - **Interface Users** with login abilities
  - **Traders (Dealers)** with no login ability

# Firm Structure

## Trading Member

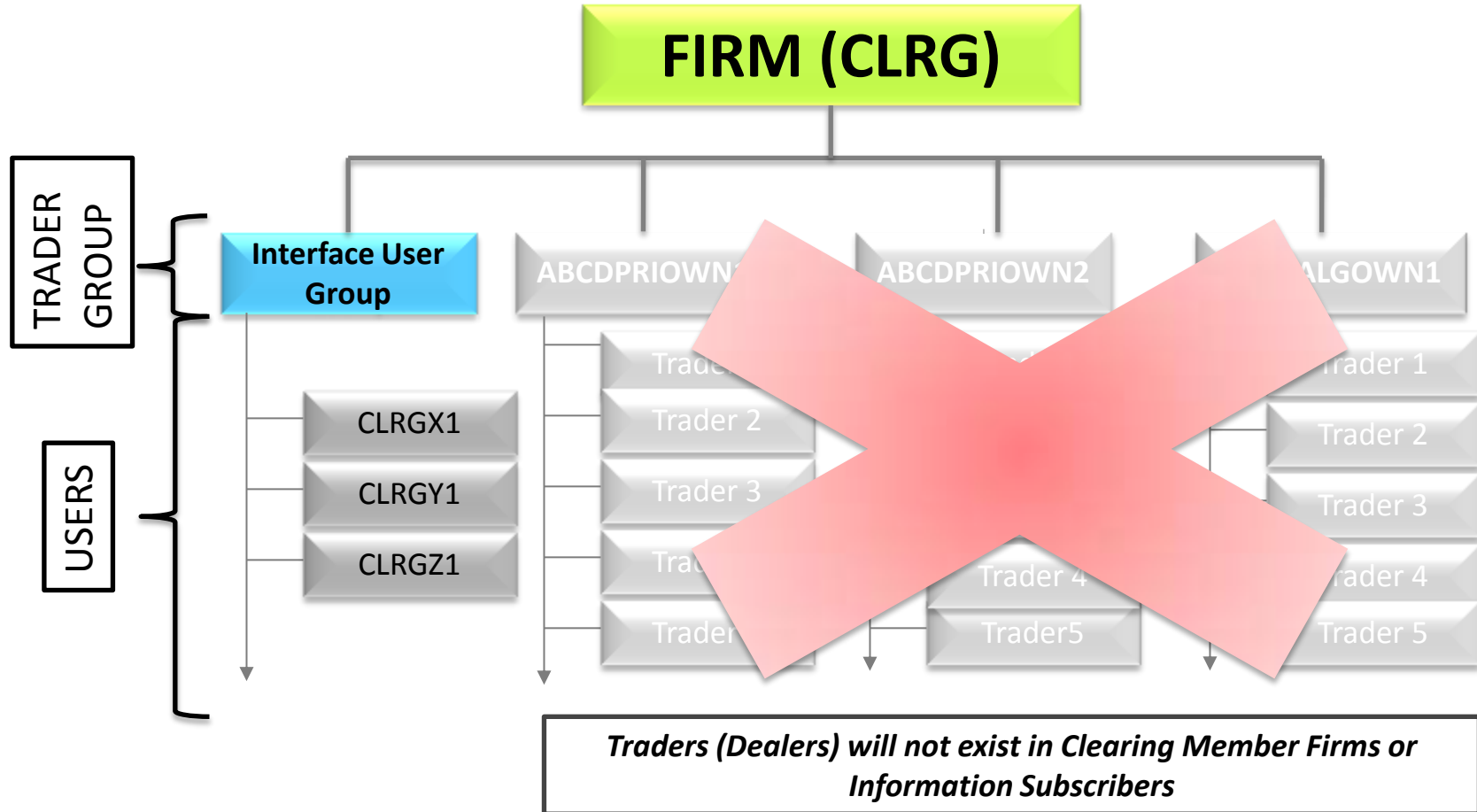


*Traders (Dealers) will be assigned to all trader groups it is up to the Member to manage trader access per trader group per Interface*

# Firm Structure

Clearing Member or Information Subscriber

JS



# Trader Groups

## Definition



- Trader Groups are not the same as **Branches** and are used exclusively for TraderID (Dealer) grouping on the Trading Engine
- An overall Interface User Group will contain all CompIDs of the firm
- All Trader Groups will contain all Traders (Dealers) within the firm
- Predefined codes for trader group type and software will exist

# Trader Groups for Derivatives Markets

## Naming Convention for Trading Members



Char 1-4	Char 5-7	Char 8-10	Char 11	
<i>Broker Alpha</i>	<i>Type*</i>	<i>Software</i>	<i>Number</i>	<i>Description</i>
eg ABCD	PRI	OWN	1	ABCD Prime Broking On Own Software

Interface User  
Group

ABCDPROWN1

ABCDPRIXYZ1

ABCDALGOWN1

Char 1-4	Char 5-7	Char 8-10	Char 11	
<i>Broker Alpha</i>	<i>Type*</i>	<i>Software</i>	<i>Number</i>	<i>Description</i>
eg ABCD	PRI	XYZ	1	ABCD Prime Broking On XYZ Software

\* Clients to advise JSE on 'Types' required



# Trader Groups for Derivative Markets

## Existing Trader Group Types



Char 1-4	Char 5-7	Char 8-10	Char 11	
<i>Broker Alpha</i>	<i>Type*</i>	<i>Software*</i>	Number	Description
eg ABCD	PRI	OWN	1	ABCD Prime Broking On Own Software

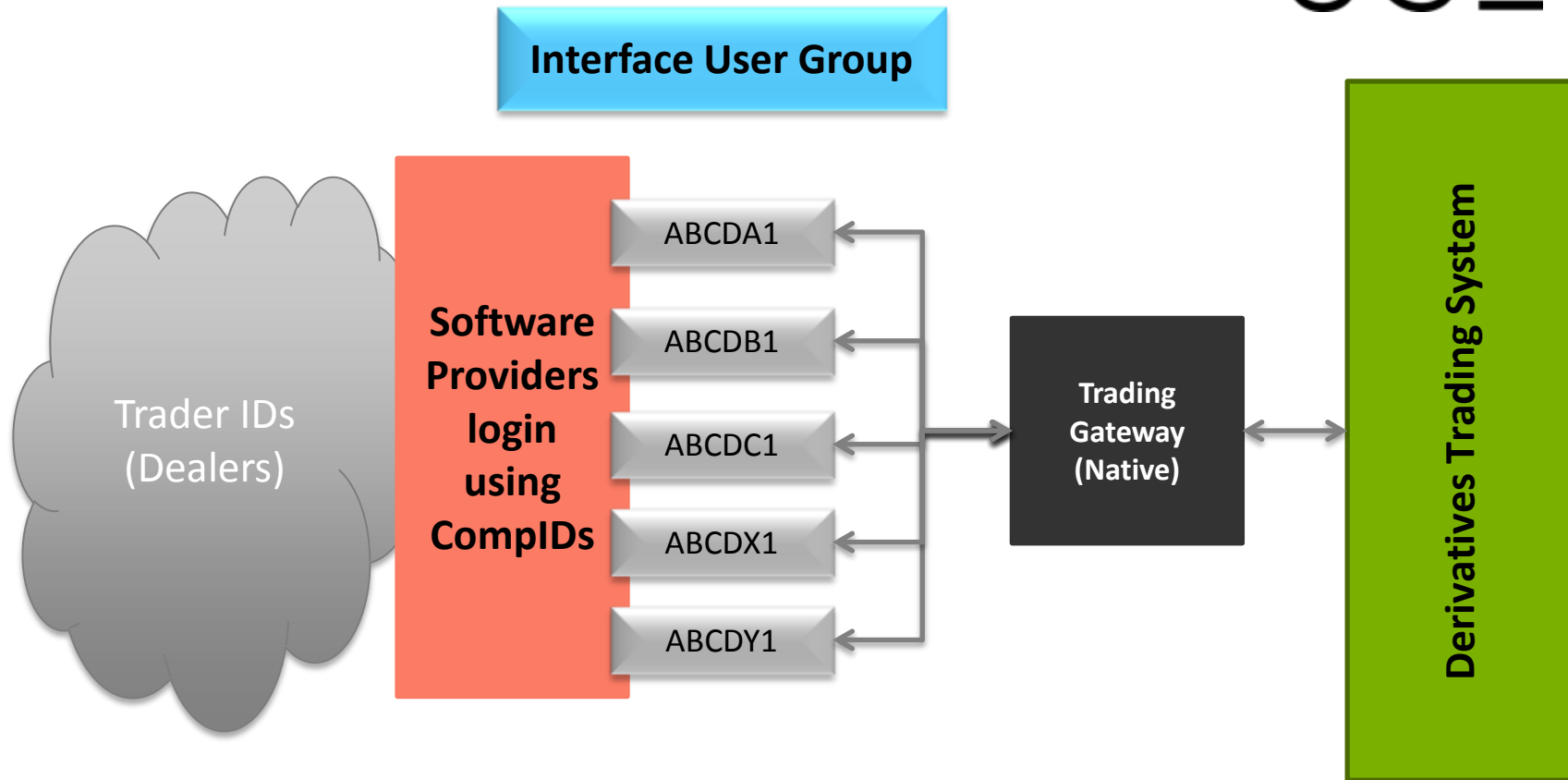
Code	Description
ALG	Algorithmic Trading Application
BSK	Basket Trading Application
COL	Colocation Trader Group
DMA	Direct Market Access Application for controlled and non-controlled clients
RST	Registered Securities Trader
WAR	Warrant Trading Application
...	Clients can request additional codes

Code	Description
JHB	Johannesburg Software Co
MID	Midlands Development
LOC	Local is Lekker SW
QUI	Quick Frontend
OWN	Broker's own custom solution
BAR	Bar Studios Trading SW
...	Software Providers updated as required

# Interface Users

Login to Gateways

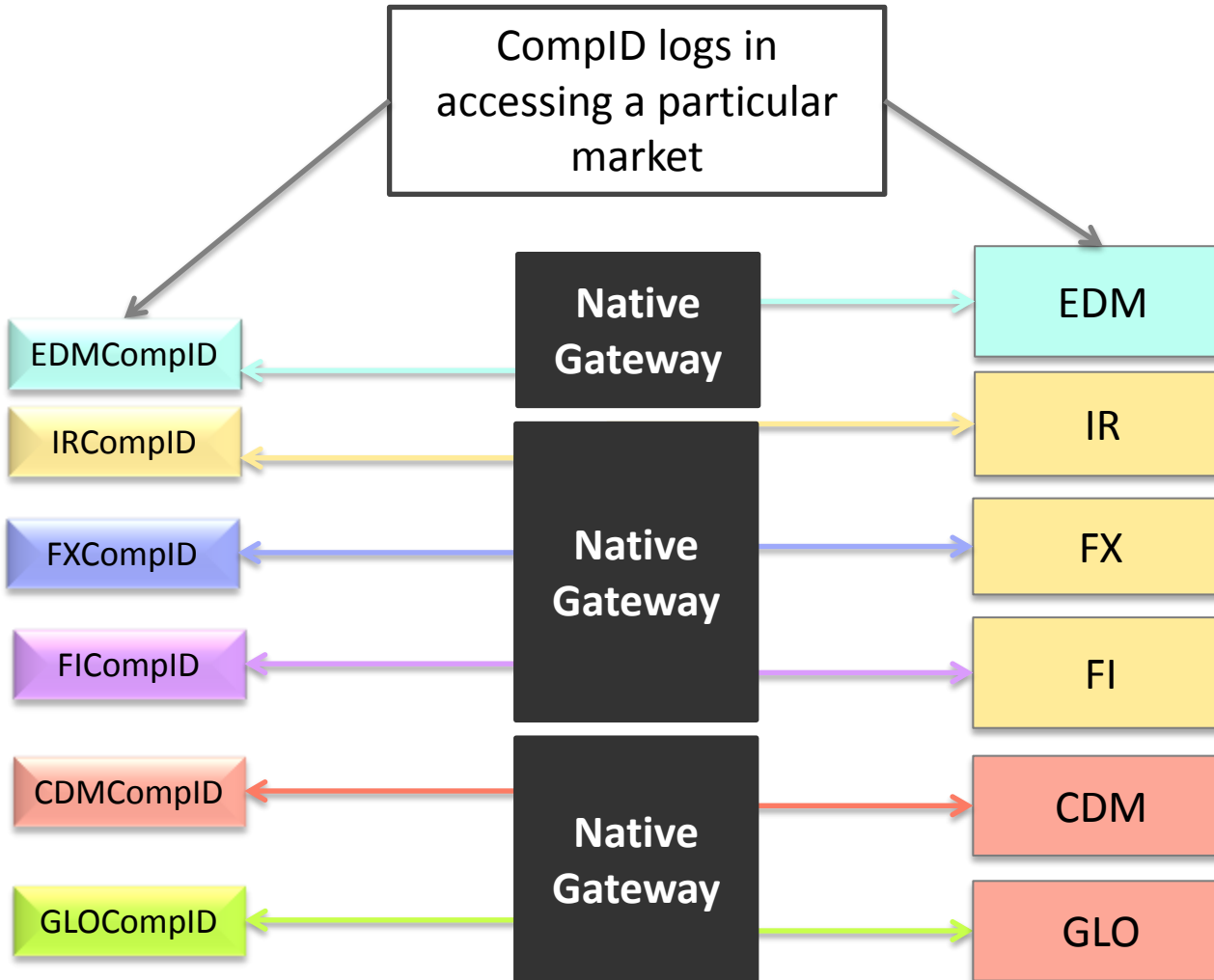
JS



Trader IDs submit orders/trades through CompIDs that are logged into the Trading Gateway

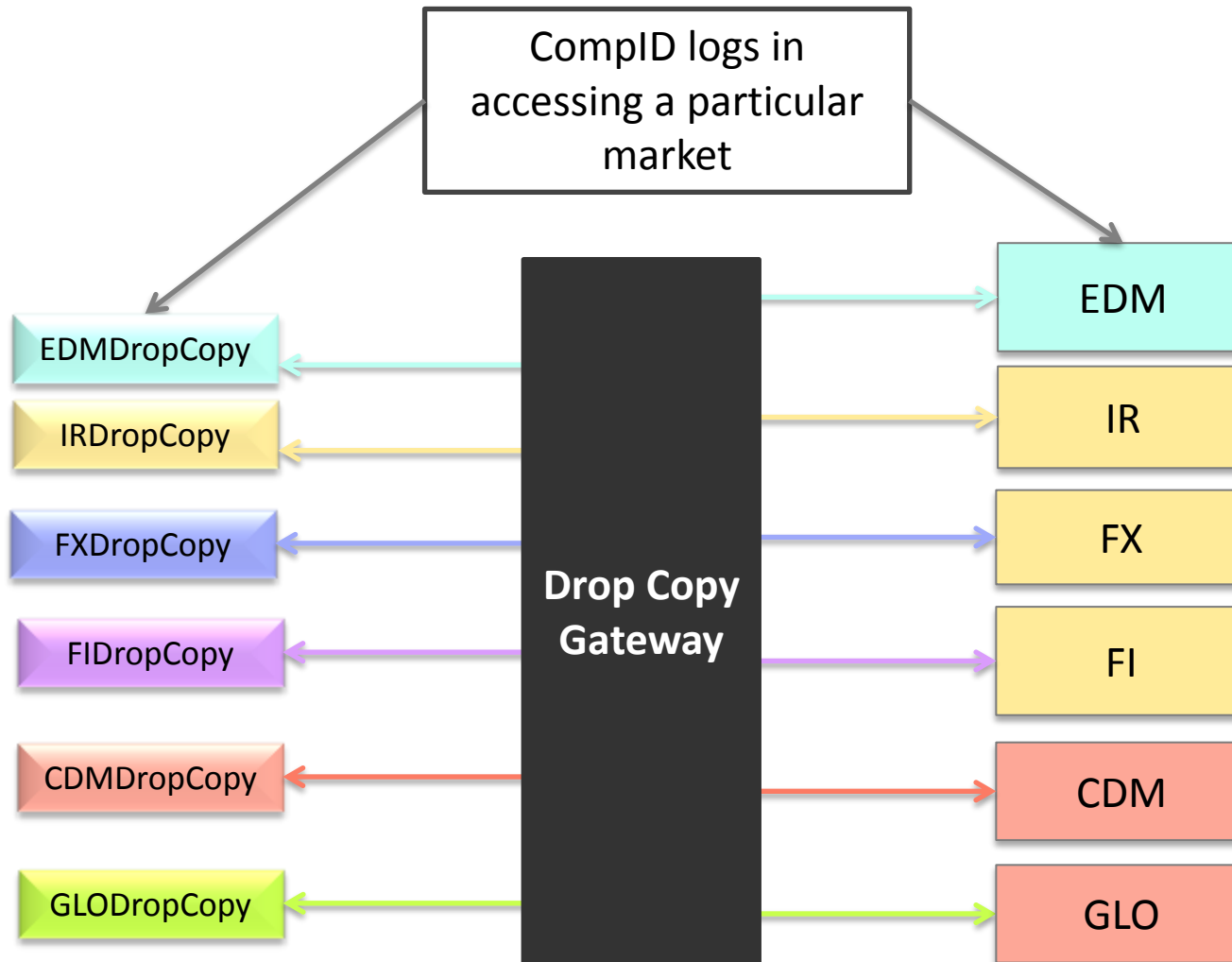
# Interface Users

## Login to Gateways – Native Gateway



# Interface Users

## Login to Gateways – Drop Copy Gateway

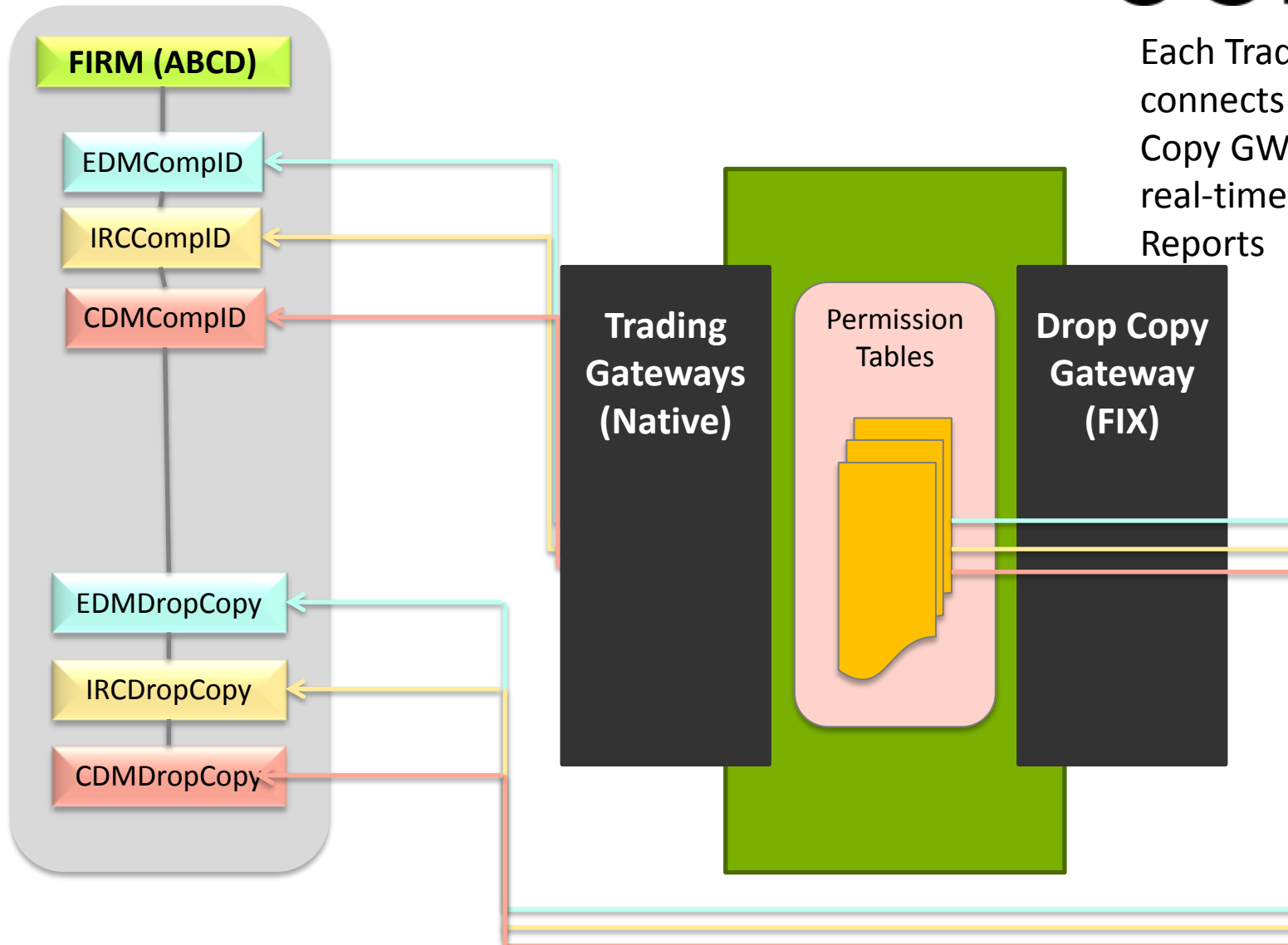


# Drop Copy Functionality

## Logical Flow – Trading Member



Each Trading Member connects to the Drop Copy GW to receive real-time Execution Reports

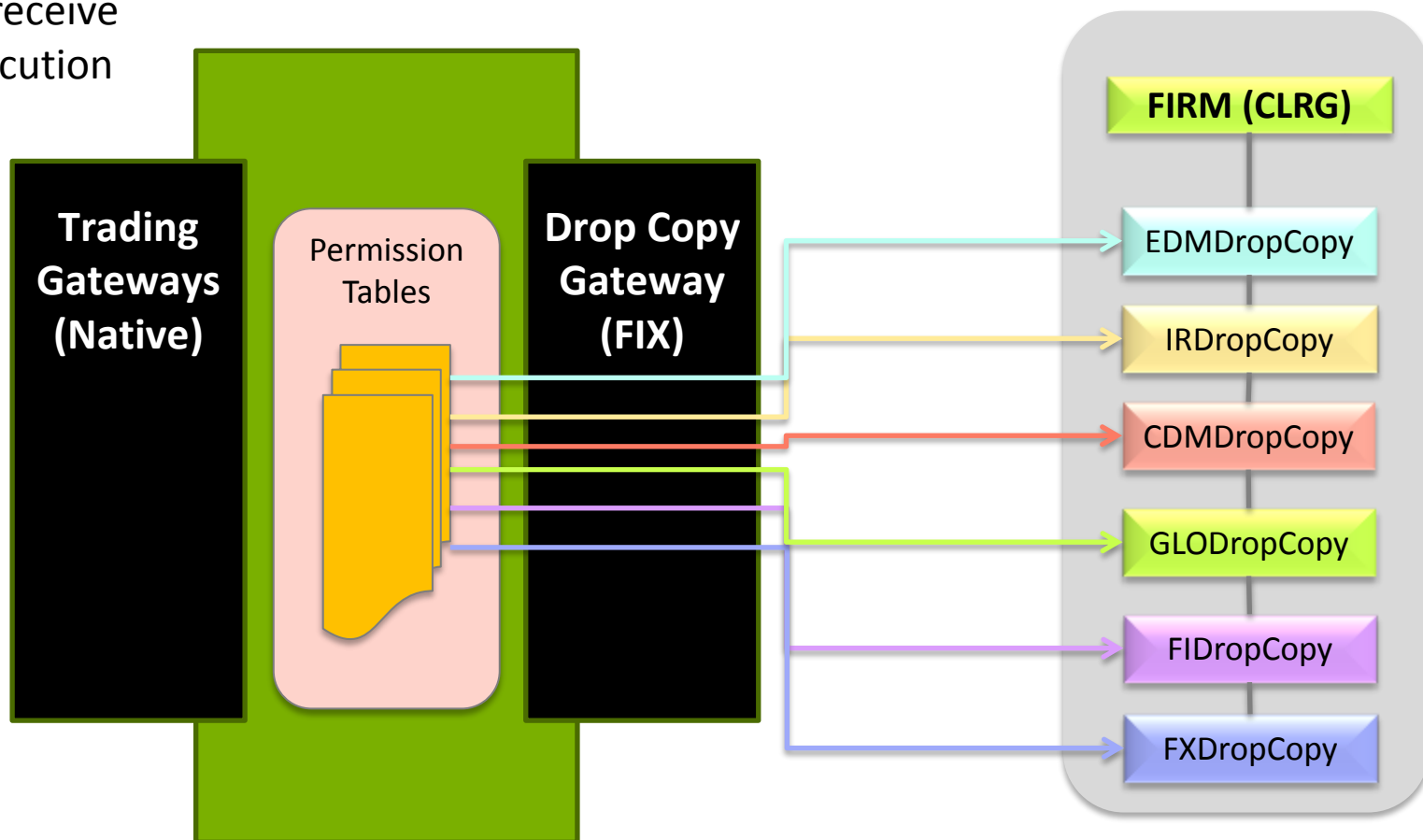


# Drop Copy Functionality

## Logical Flow – Clearing Member

JS

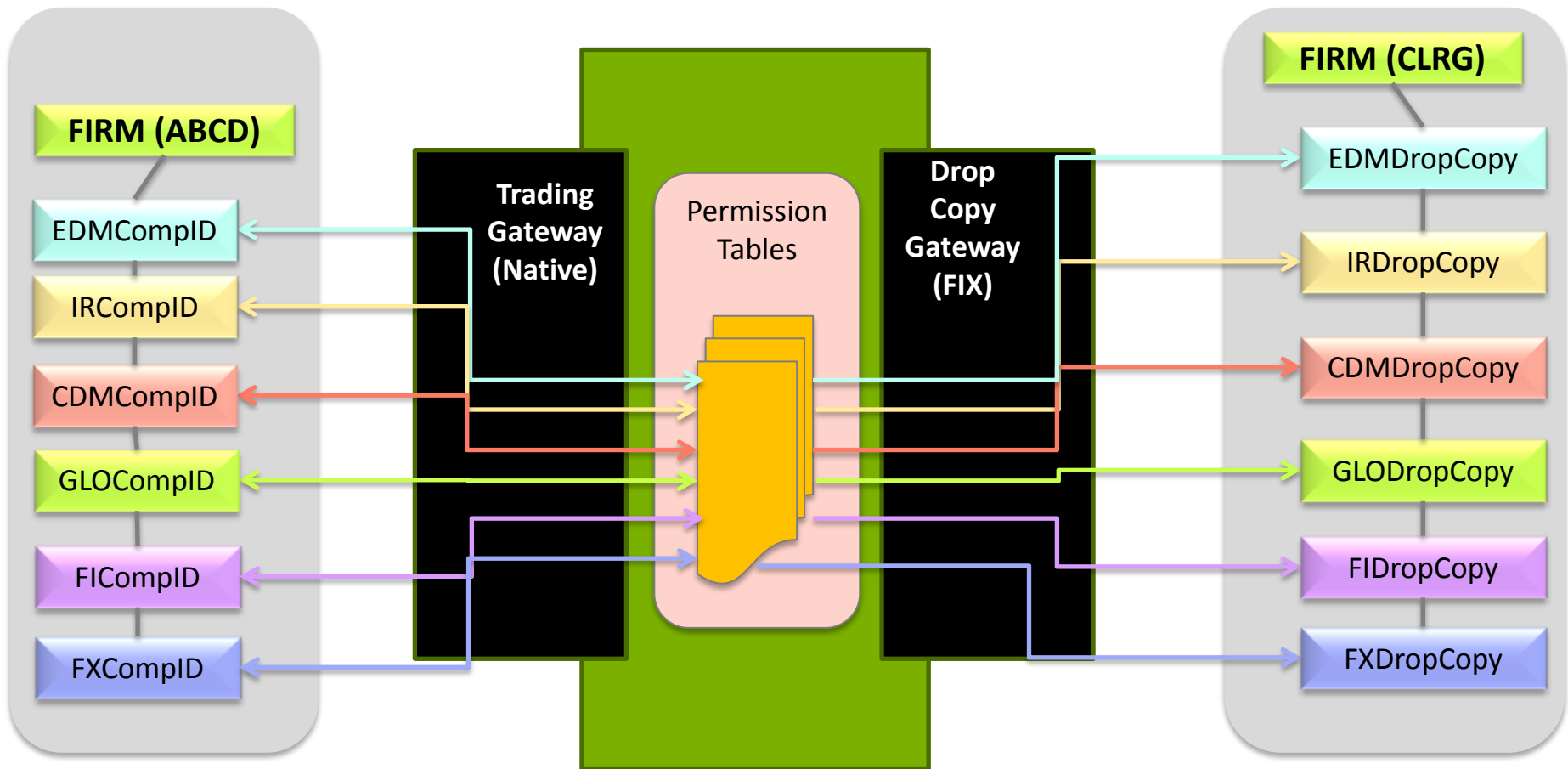
Clearing Members  
connect to the Drop  
Copy GW to receive  
real-time Execution  
Reports only



# Drop Copy Functionality

Logical Flow – Drop Copy flow incorporating TM and CM

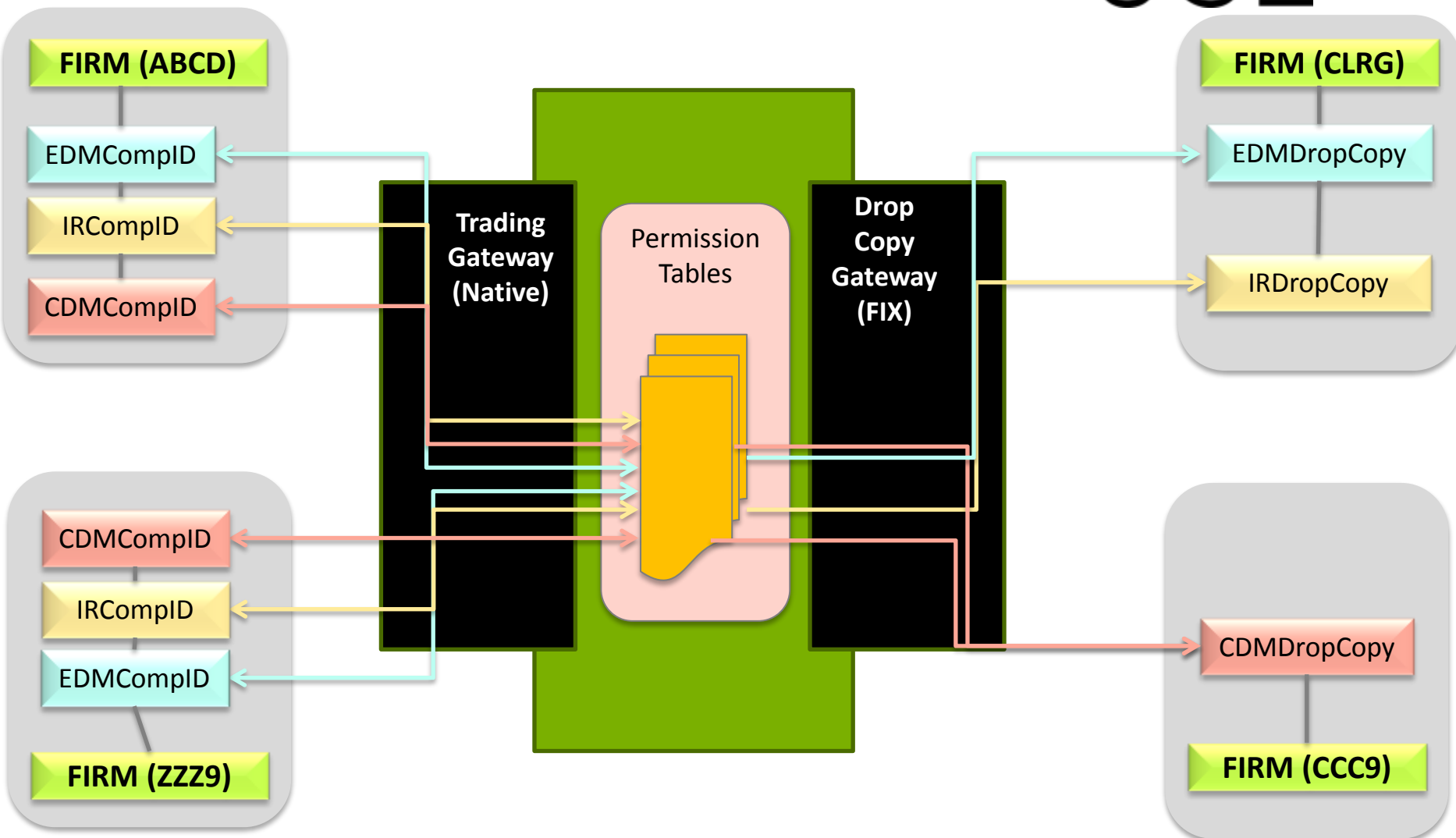
JSΞ



# Drop Copy Functionality

Logical Flow – Drop Copy flow incorporating TM and CM

JSΞ





# Drop Copy Functionality

## Permission Table – Firm Table



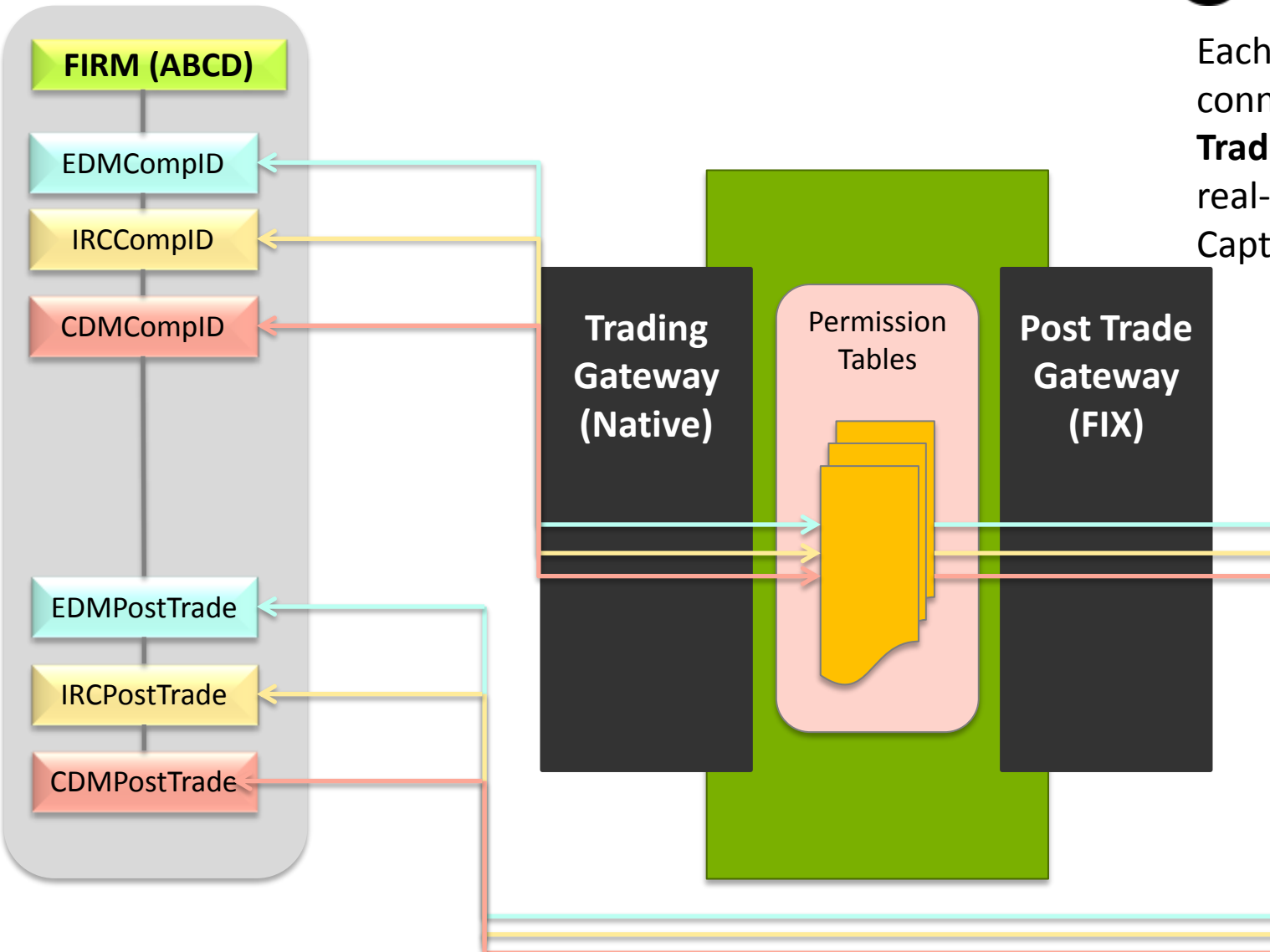
- Execution Reports will be sent to the Drop Copy ComplIDs in real time
- Tag 115 – OnBehalfOfCompID will be populated within the header of each Execution Report identifying which CompID was the cause of the Execution Report
- Thus, a Drop Copy CompID can connect per Market and receive Execution Reports on behalf of numerous CompIDs across various Trading Members
- All Execution Reports will also identify the Firm, Trader Group and TraderID within the Trading Party Block

# Trade Copy Functionality

## Logical Flow – Trading Member



Each Trading Member connects to the **Post Trade GW** to receive real-time Trade Capture Reports (TCRs)

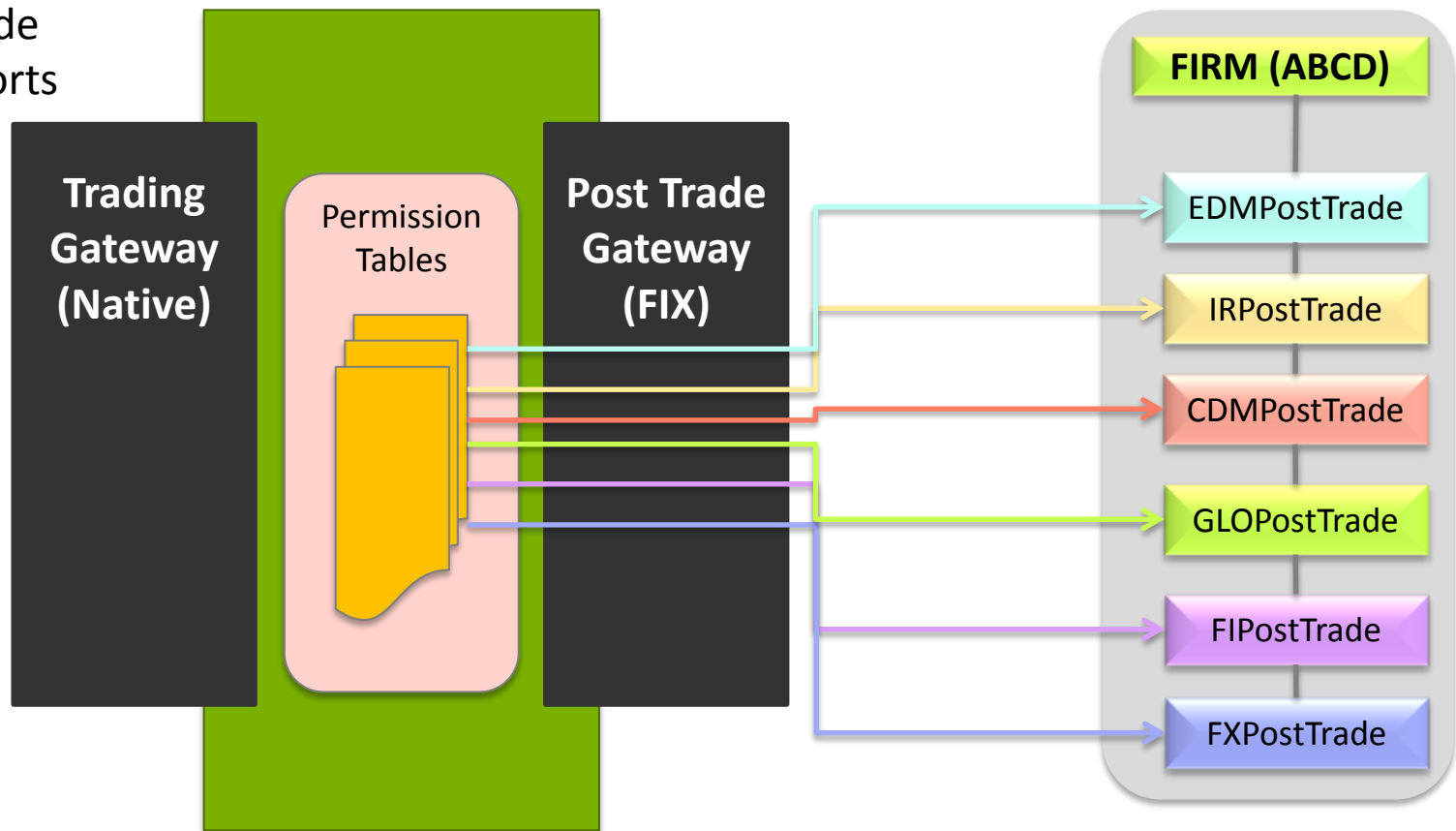


# Trade Copy Functionality

## Logical Flow – Clearing Member

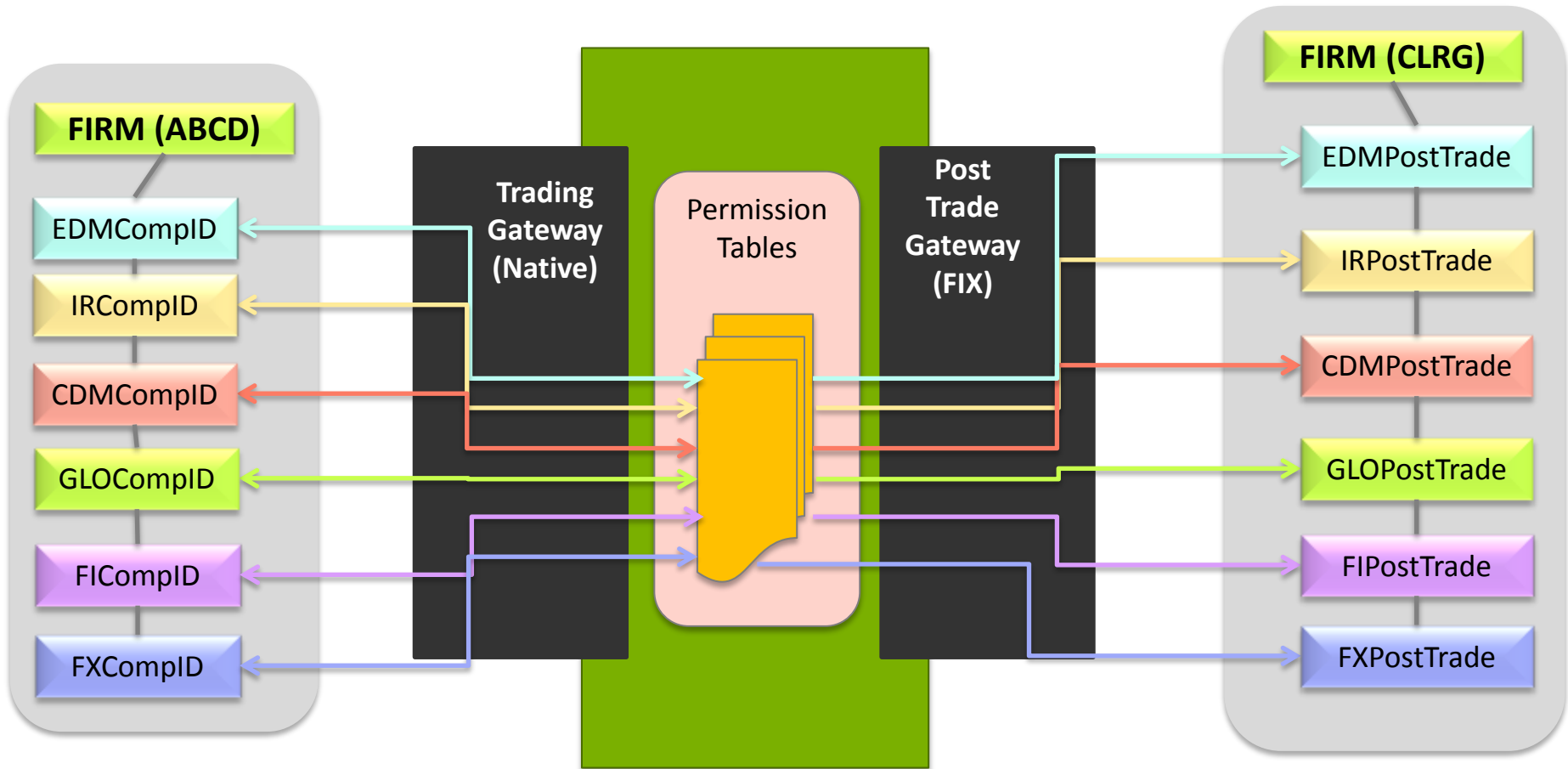


Clearing Members  
connect to the **Post  
Trade** GW to receive  
real-time Trade  
Capture Reports  
(TCRs)



# Trade Copy Functionality

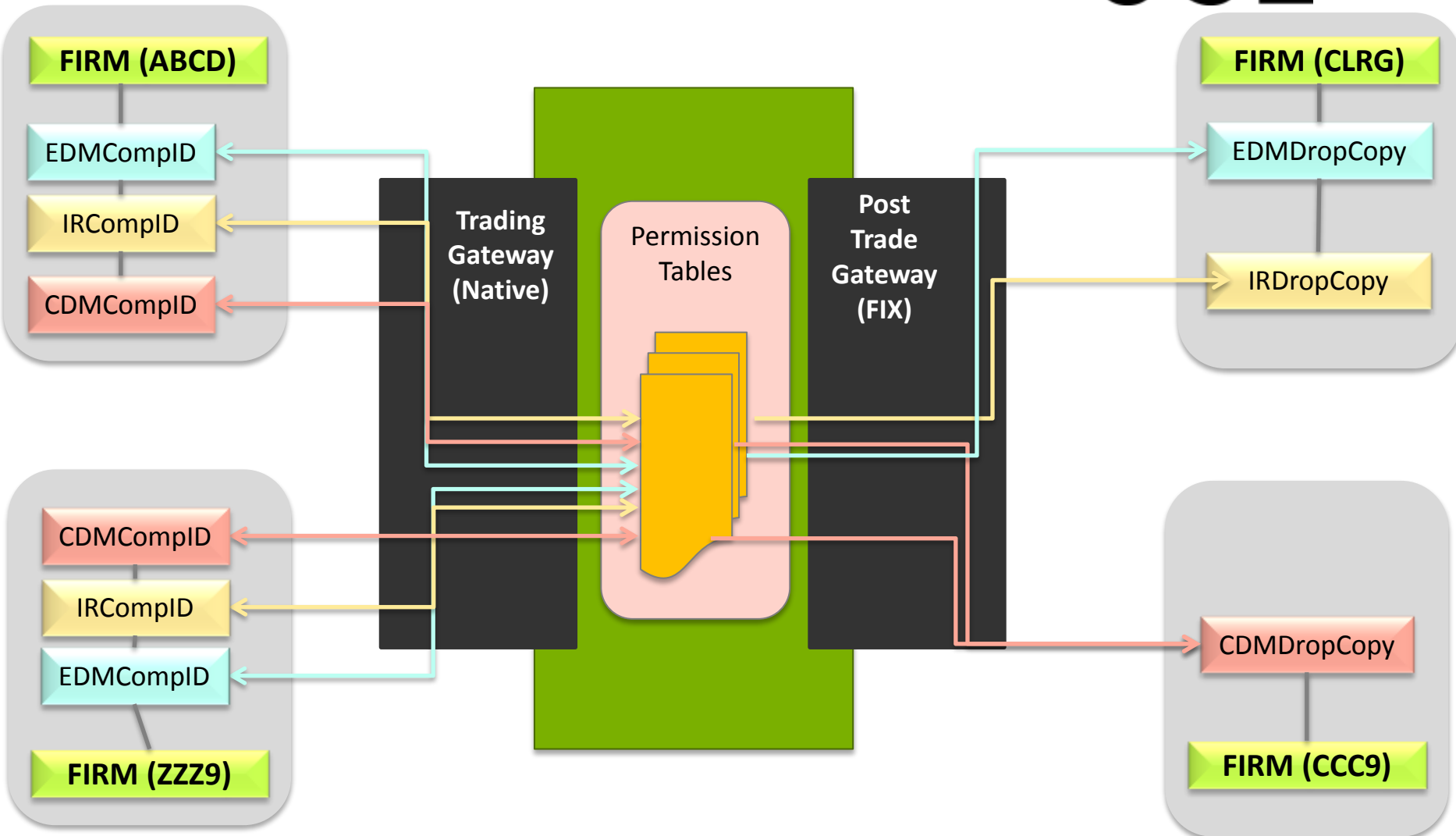
Logical Flow – Trade Copy flow incorporating TM and CM



# Trade Copy Functionality

Logical Flow – Trade Copy flow incorporating TM and CM

JS



# Trade Copy Functionality

## Permission Table – Firm Table



- Trade Capture Reports (TCR) will be sent to the Post Trade ComplDs in real time
- Trade information will reside in the TCR message
- Thus, a Post Trade ComplD can connect per Market and receive TCRs on behalf of numerous ComplDs across various Trading Members
- All TCRs will also identify the Firm, Trader Group and TraderID within the Trading Party Block

# Permission Table

## Firm Table



### Permission Table – Firm Table

CLRGX1	CLRGY1	CCC9Z1
ABCD	ABCD	ABCD
ZZZ9	ZZZ9	ZZZ9
YZSY		YZSY

A Trading Member clears with one Clearing member per market

- Permissions are set on a **FIRM** level
- Restrictions exist on the CompID level

# Permission Table

## Instrument Groups



Permission Table – Instrument Groups

	EDM	Options	EDM Futures	CDM 1	CDM 2	IR 1	SB 1	FX 1	GLO 1
CLRGX1	✓	✓	✗	✗	✗	✗	✗	✗	✗
CLRGY1	✗	✗	✓	✓	✗	✗	✗	✗	✗
CCC9Z1	✗	✗	✗	✗	✓	✗	✗	✗	✗
CCC9J1	✗	✗	✗	✗	✗	✗	✓	✗	✗

ComplIDs are restricted on receiving data based on  
**Instrument Groups**

- Allows for Trading Members to use separate Clearing Members per Market



# Permission Table

## Instrument Groups



### Permission Table – Instrument Groups

- Instrument Groups will initially be setup at the highest level and as required will be expanded to include groups that make logical sense to segregate

# CompID Naming Convention



**CompID = Member Alpha | Type | Number/Letter**

Alpha	Type	Number	CompID	Description
ABCD	X	1	ABCDX1	EDM Trading CAN* User
LKGG	X	A	LKGGXA	EDM Trading Colocation User
ABCD	Y	1	ABCDY1	CDM Trading CAN* User
ABCD	Z	1	ABCDZ1	IR, Bonds, FX Trading CAN* User

\*CAN = Client Access Network



- ISIN codes will be introduced for the Derivatives Markets
  - Uniquely identified across markets (TBC)
  - Will not be immediately available instruments created intraday, however will be available as part of the EOD files (TBC)

# Agenda

---

JSΞ

- Collateral
  - Background
  - Principles
  - Processes
    - EOD - Securities (recap) and foreign currency
    - Intraday - Securities

# Collateral - Background



- Following the financial crisis regulatory developments (Basel, CPMI IOSCO, EMIR etc) have increased capital requirements and raised the need for efficient asset utilisation
- Currently only ZAR cash is accepted as collateral against exposures in the JSE Derivatives markets
- With the implementation of ITaC Phase 1, JSE Clear will cater for the acceptance of securities collateral and potentially also foreign currency collateral against Initial Margin (IM)



# Collateral – Principles



- Securities
  - Initially highly liquid equities and government bonds
  - Other asset types may be considered in future
- Foreign currency
  - JSE is in the process of engaging with SARB and National Treasury to obtain the necessary regulatory approvals for the acceptance of foreign currency collateral
  - It is envisaged that initially foreign currency collateral will be allowed for IM obligations of non-resident clients
  - Phase I will only allow USD, EUR, GBP foreign currencies

JSE will regularly review and publish collateral eligibility criteria

## Collateral – Principles (cont.)



- JSE Clear
  - Sets a minimum percentage of collateral required in ZAR cash
  - Sets eligibility criteria for non-ZAR cash assets
  - Values collateral
  - Determines collateral haircuts
- Clearing Members (CM) and Trading Members (TM) can increase the minimum ZAR cash percentage (make it more stringent)

Provided the min ZAR cash percentage and eligibility criteria are met, market participants determine the mix of securities and foreign currency

## Collateral - Principles (cont.)

---



- The pledge mechanism will be used for securities collateral
- JSE intends using Strate's Clearstream Collateral Management System (CMS) for management of securities collateral
- Participants wishing to post securities collateral will need to set up a Segregated Depository Account (SDA) at Strate



# Collateral – Process objectives

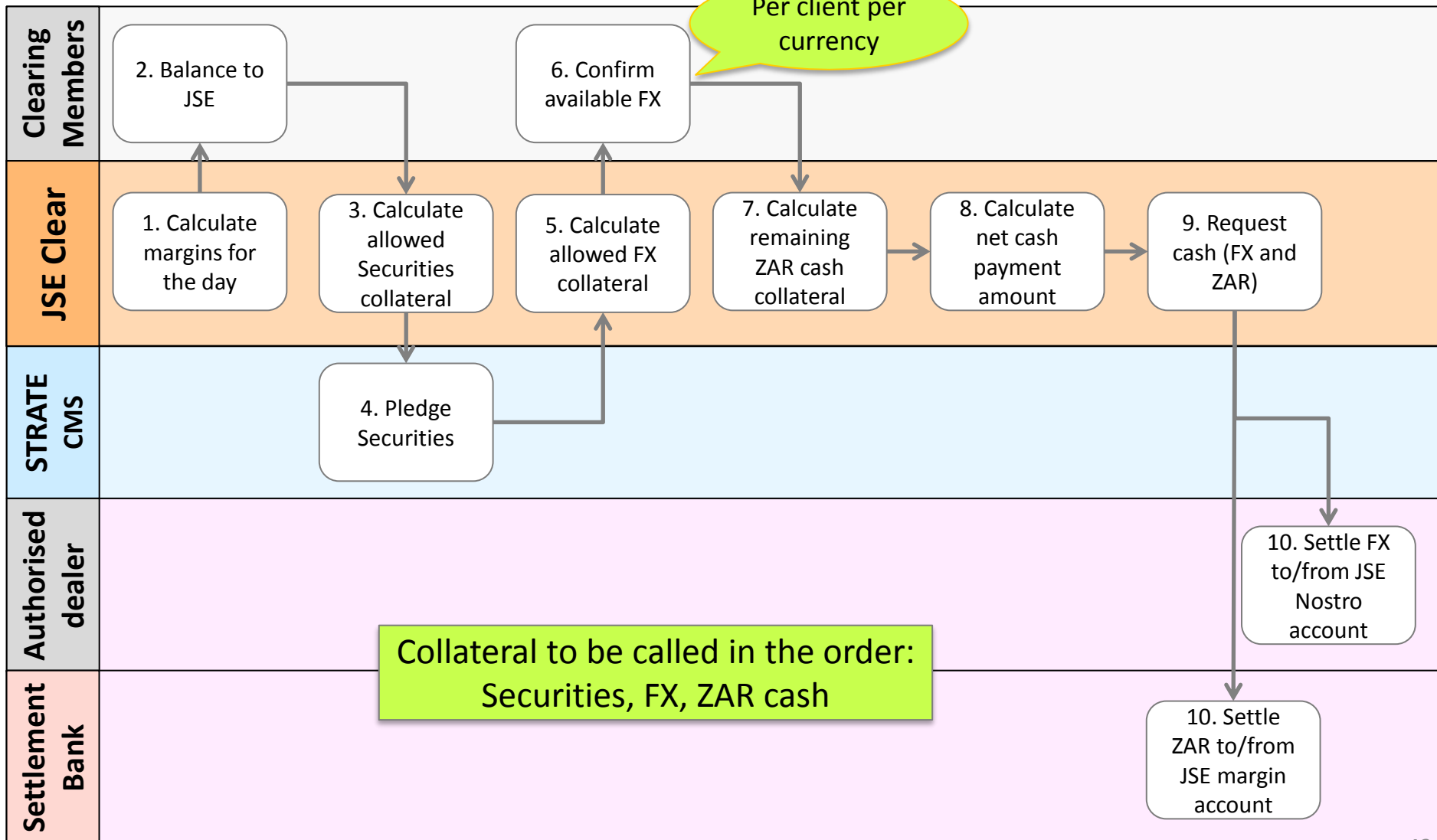
---



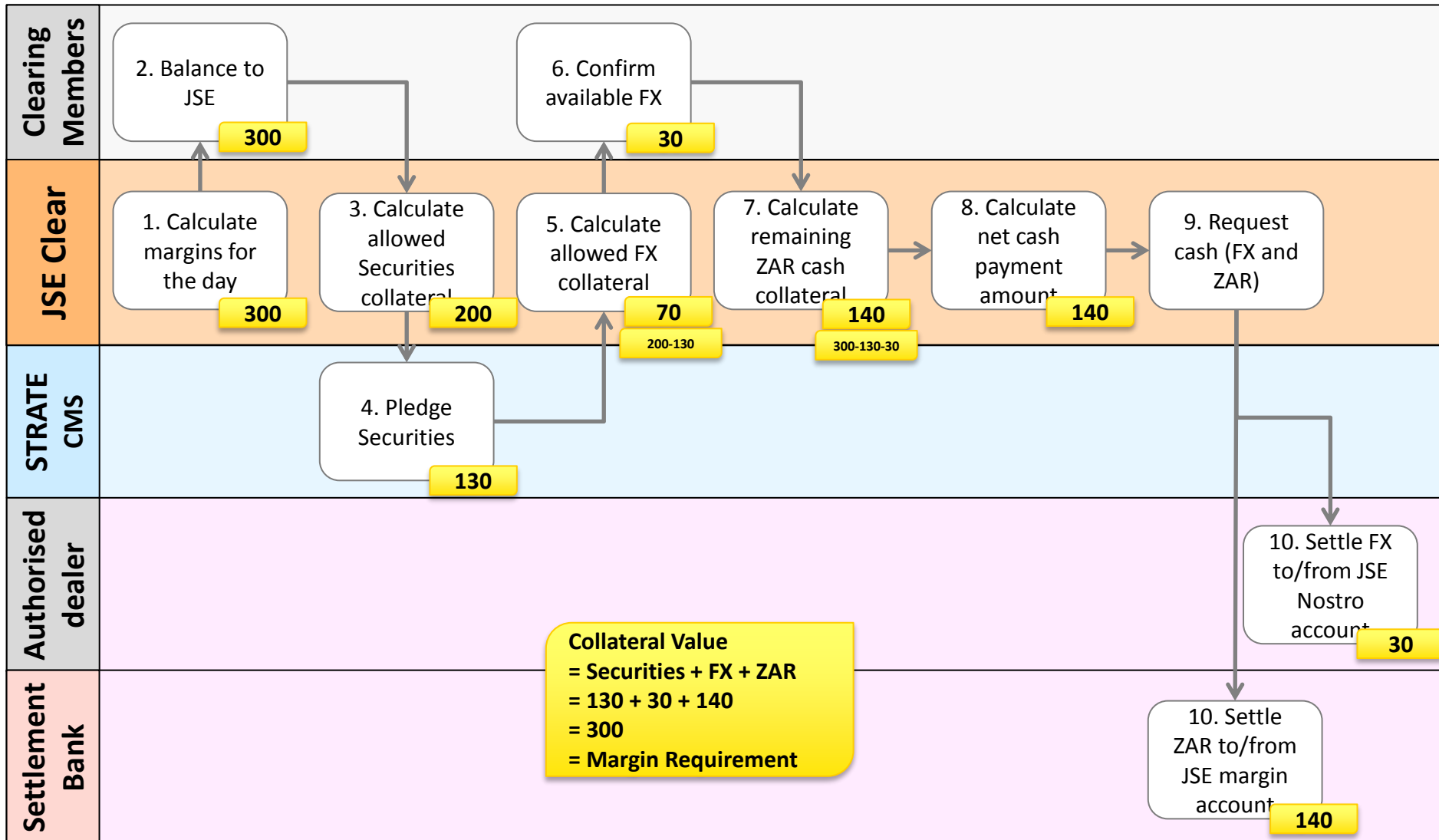
- EOD process
  - Posting of collateral against IM
    - Securities, foreign currency, ZAR cash
- Intraday processes
  - Allow for changing the mix of collateral posted against IM<sup>1</sup>
  - Provide market participants with flexibility in managing their assets and collateral
    - Substitute cash for securities, securities for cash, or one security for another

*<sup>1</sup>This is the IM as calculated in previous day's EOD process*

# Collateral – EOD Process



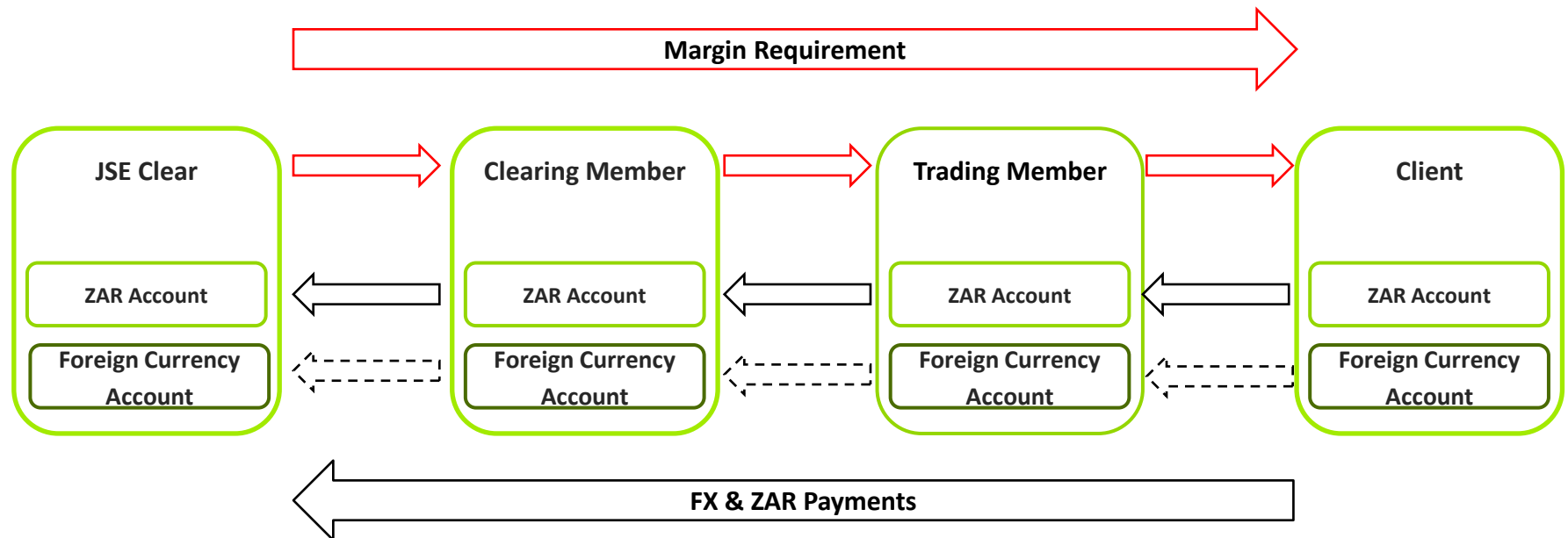
# Collateral – EOD Process (Example)



# Collateral – EOD Process (Foreign Currency Flows)



Foreign currency flows between foreign currency (Nostro) accounts held at Authorised Dealers at the CM, TM and client level



# Collateral – Intraday Processes

---



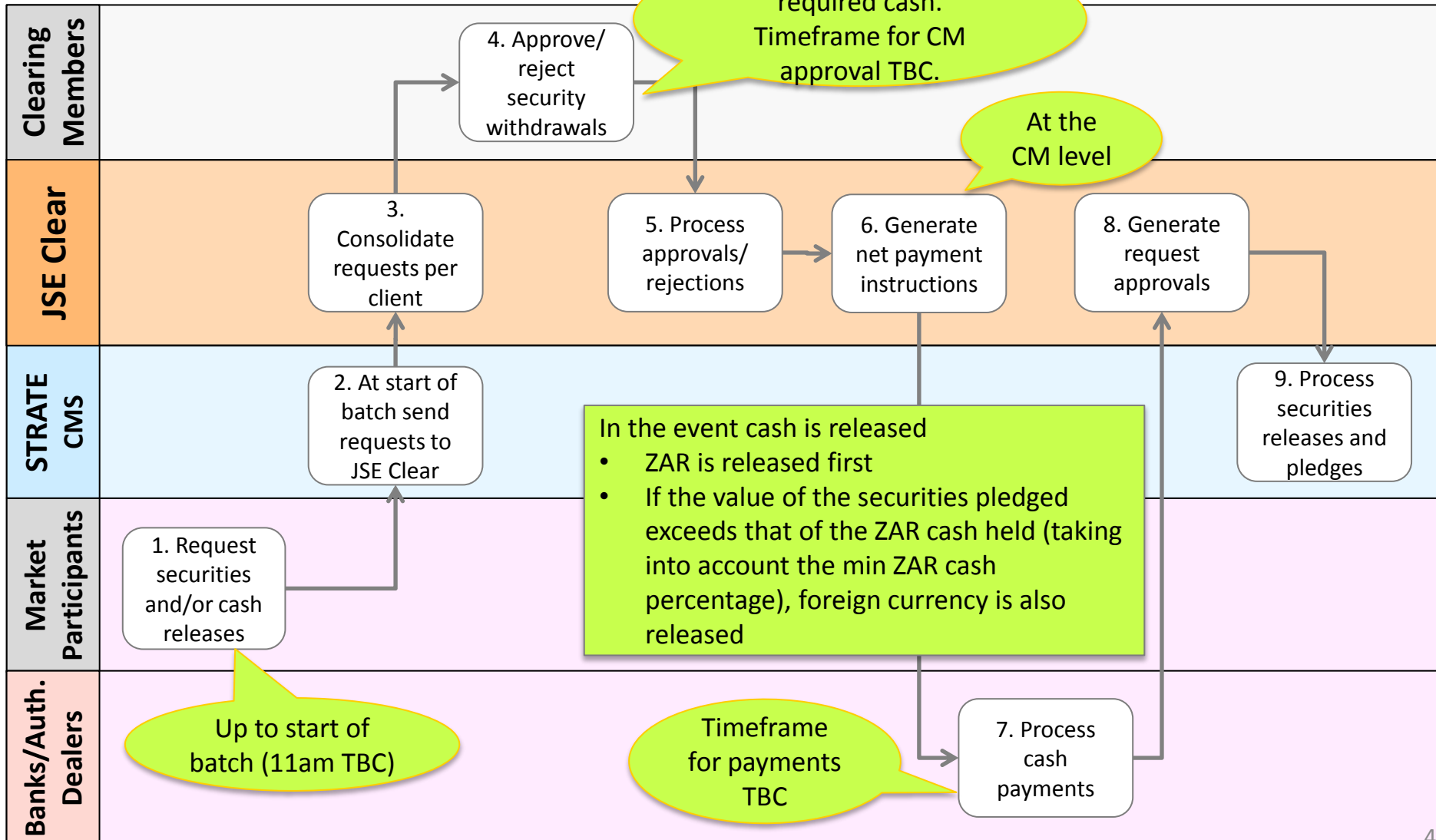
The Clearing system will cater for the following intraday collateral processes

- An intraday batch process
  - Catering for securities collateral substitutions which require associated cash payments
    - Release securities by paying cash
    - Release cash by pledging securities
- Regularly throughout the day
  - Securities for securities substitutions and securities top-ups

# Collateral – Intraday Processes (cont.)



## Intraday batch process



# Collateral – Intraday Processes (cont.)

---



Regularly throughout the day

- Substitutions of one security for another
  - JSE Clear sends Strate CMS updated prices periodically to ensure substituting securities are equivalent in value
- Securities collateral top-ups
  - If the value of the pledged securities on an account falls below a specified threshold due to price decreases, additional securities are pledged to ensure the exposure (IM) is covered
  - If securities are not available a cash call is generated (will be processed in the intraday batch process if received before start thereof)

# Questions?

JSE



[ITAC@jse.co.za](mailto:ITAC@jse.co.za)



+27 11 520 7384