

CCP clearing for the South African bonds and repo markets

Market workshop – Session 9
19th March 2024

let's connect

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JSE | CLEAR

- **Introduction and Project Update**
- Recap: Trade and settlement flow
- Clearing Membership criteria
- Clearing Member Obligations
 - Daily settlement processing
 - Daily margin processing
 - Clearing Member Impacts
- Conclusion and next steps

Primary objectives of the Bonds CCP market workshops:

- I. **Consulting and collaborating with market participants** including trading members, clients, clearing members, Strate and CSDPs around the detailed design and requirements of the CCP clearing service.
- II. **Discussing and understanding the change impact and interdependencies** across the various market participants' business processes and IT systems.
- III. **Providing necessary project status updates** including updates to project timelines and key milestones.
- IV. **Providing the required training and support** to operational teams prior to market testing and go-live.

Who should attend these workshops?

Business managers, Business operation leads/managers, IT leads/ managers, Project managers

MARKET WORKSHOP DATES FOR 2024:

- ✓ Session 9 – 19th March
 - Session 10 – 16th April
 - Session 11 – 21st May
 - Session 12 – 18th June
 - Session 13 – 23rd July
 - Session 14 – 20th Aug
 - Session 15 – 17th Sept
 - Session 16 – 22nd Oct
 - Session 17 – 19th Nov

Agendas to be sent out two weeks prior to the workshop

Topics to be covered in workshop sessions:

- Trade novation ✓
- Account structure ✓
- Trade publication ✓
- Trade cancellation ✓
- Integration with internal and external systems ✓
- Deal management
- Position management
- Collateral Management (cash & securities) ✓
- Settlement management ✓
- Risk management and margining ✓
- Fees and billing
- Reporting
- Default management ✓
- Clearing membership criteria ✓
- CCP rules, policies and procedures

Primary drivers for Bonds CCP

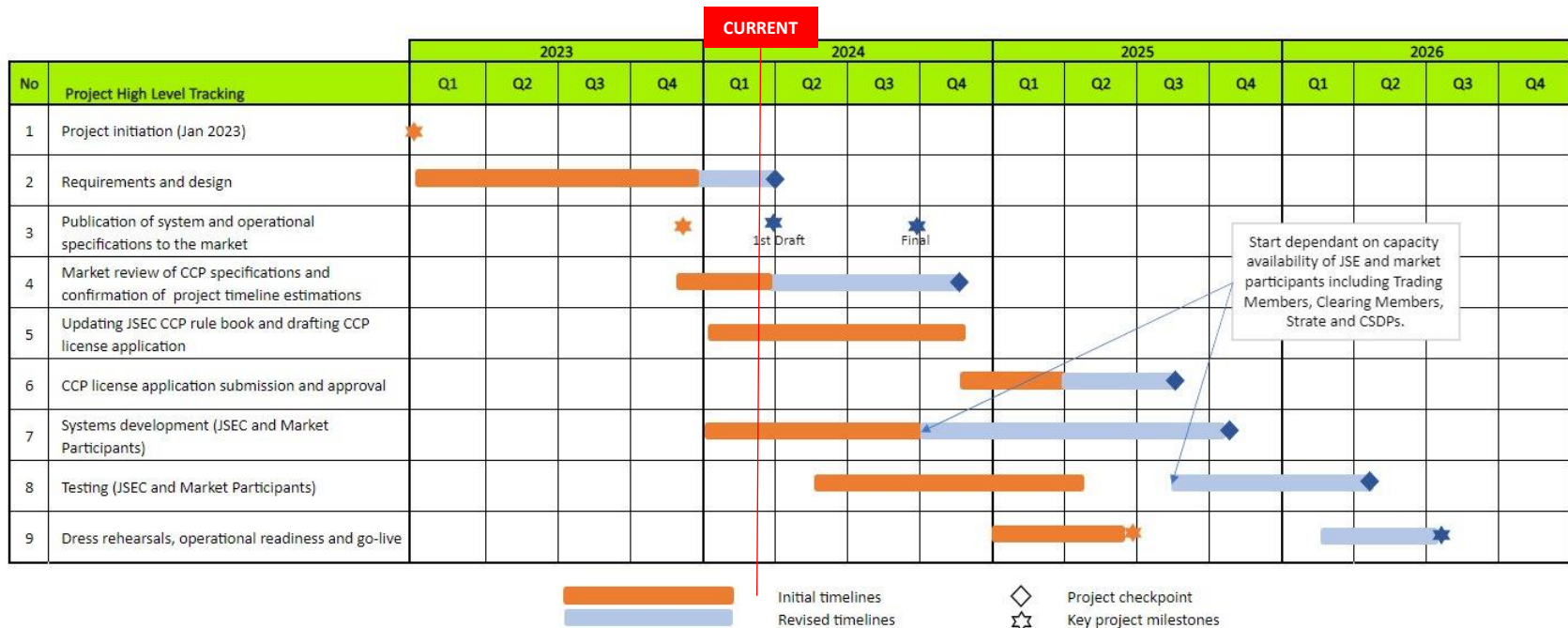
- CCP clearing is a critical service required to scale and increase trading activity in the Bonds ETP market, that is currently limited in access to the 10 Primary Dealers and represents only 1% of the total bonds and repo trading activity in SA. Electronic trading and CCP clearing of repos in European markets is close to 40% (and rising) of total trading activity.
- The three primary objectives and market benefits of Bond and Repo CCP clearing include:
 - i. broadened access to ETP and repo markets and increased trade liquidity;
 - ii. reduced counterparty credit risk and increased operational efficiency for banks; and
 - iii. improved market protection and price transparency.

Why JSE Clear?

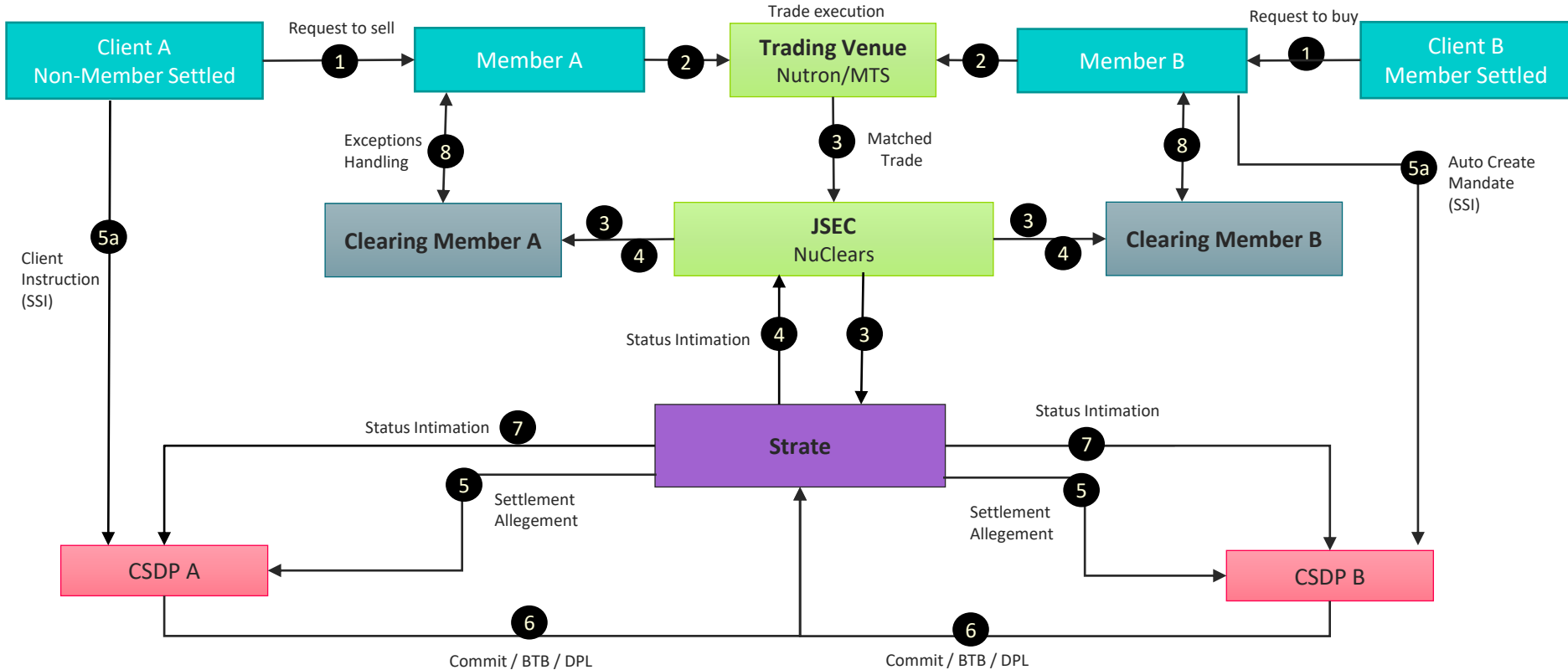
- JSE Clear is a fully independent and internationally recognised CCP.
- It is well positioned to leverage its existing CCP clearing infrastructure and integration with clearing member banks to provide a timeous and cost-effective domestic bond and repo CCP clearing service for SA.



- Primary focus for 2024 will be on finalising the risk management requirements, updating the CCP rulebook and submission of the CCP license application.
- Bonds CCP timelines and dependencies to be firmed up once detailed requirements and technical impact assessments on the JSE Repos Project is completed – Q2 2024.



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- The existing JSE Clear clearing membership requirements will be applicable for clearing of bonds and repos.
- Existing JSEC Clearing Members that wish to clear Bonds and Repos, will need to sign an addendum agreement.
- A few additional requirements for clearing bonds and repos will be applicable e.g. clearing members must have an arrangement with National Treasury to be the lender of last resort to fulfil client settlement obligations.

NB. A final list of all additional membership requirements will be published in due course.

JSE Clear currently provides clearing membership for three types of entities:

**A Bank / branch
of a Foreign Bank**

(regulated by the
Prudential Authority)

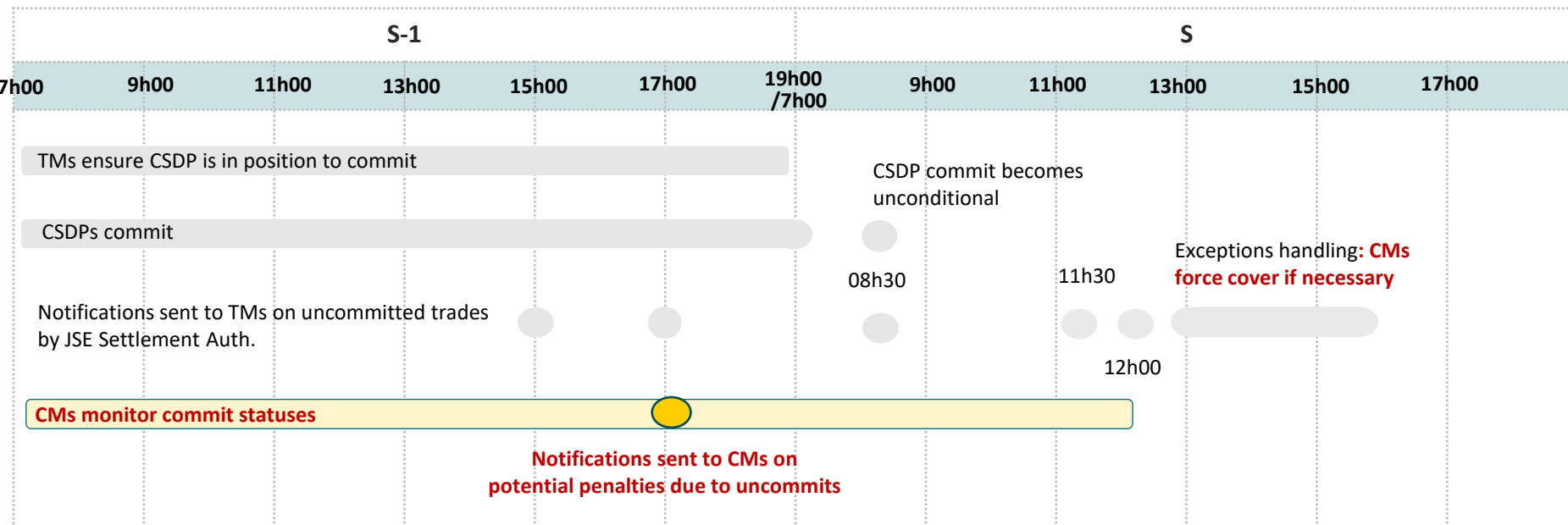
**A subsidiary of a
Bank or a Foreign
Bank**

(latter must be in a
jurisdiction that
adheres to BASEL)

**An Exchange
Member
(Non-bank)**
















(prudentially
regulated by the
exchange)

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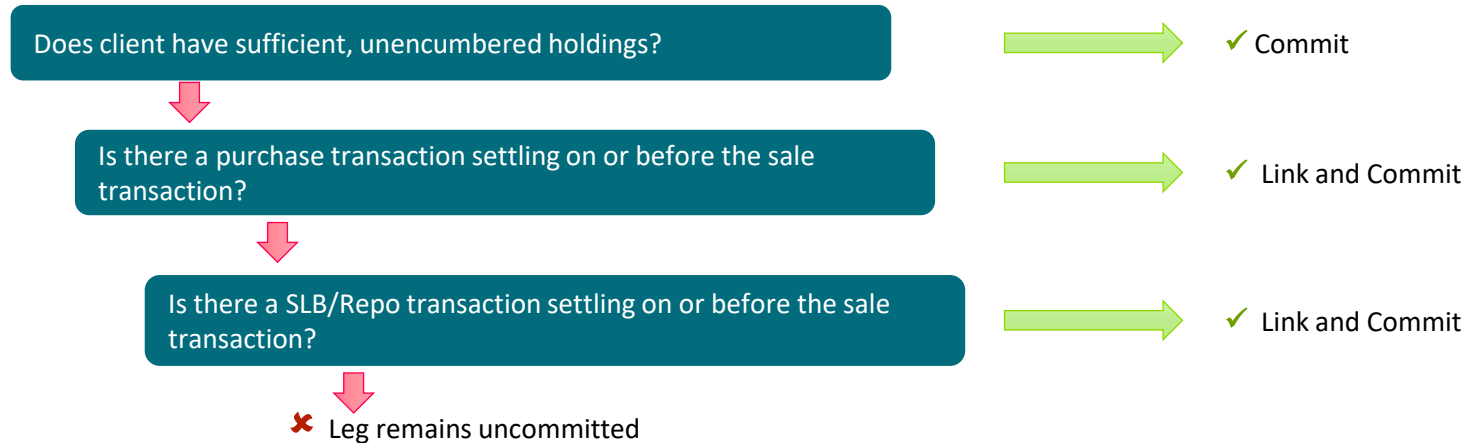


- Notifications sent to CMs from Clear Insights, include all client info on one report
- Exceptions handling for Cleared trades prioritised (like ETP trades are today)
- CMs will require access to NT liquidity as final step in exceptions handling
- Penalties will be instituted and charged to CMs for late commits

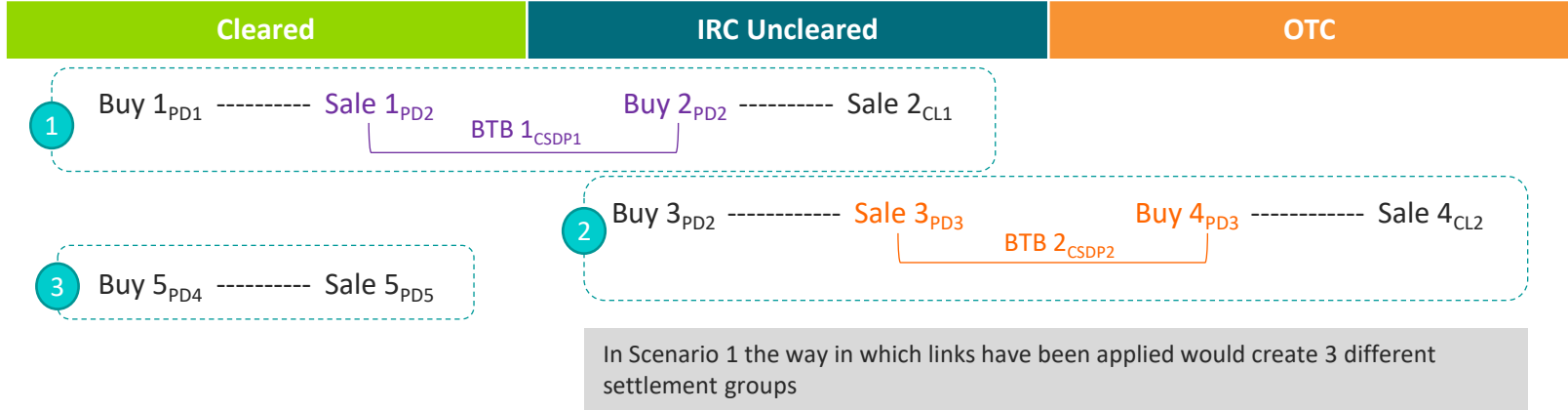
- BTB is a risk mitigation tool used by the CSDPs to link transactions with the dependencies
- The following transactions can be linked by the CSD Participants:

	Cleared (ETP & IRC)	IRC Uncleared	Off-market	SLB
Cleared (ETP & IRC)				
IRC Uncleared				
Off market				
SLB				

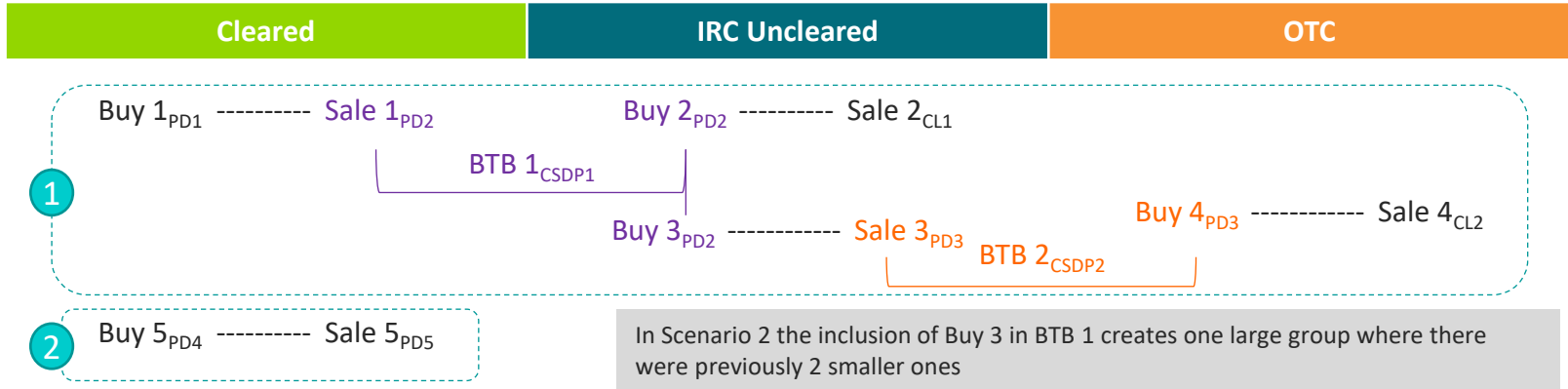
- To apply back-to-back links, all trade legs need to be part of the same:
 - Custody account
 - ISIN
 - Settlement date
- CSDP logic for linking and committing to a sale transaction follows these basic principles:



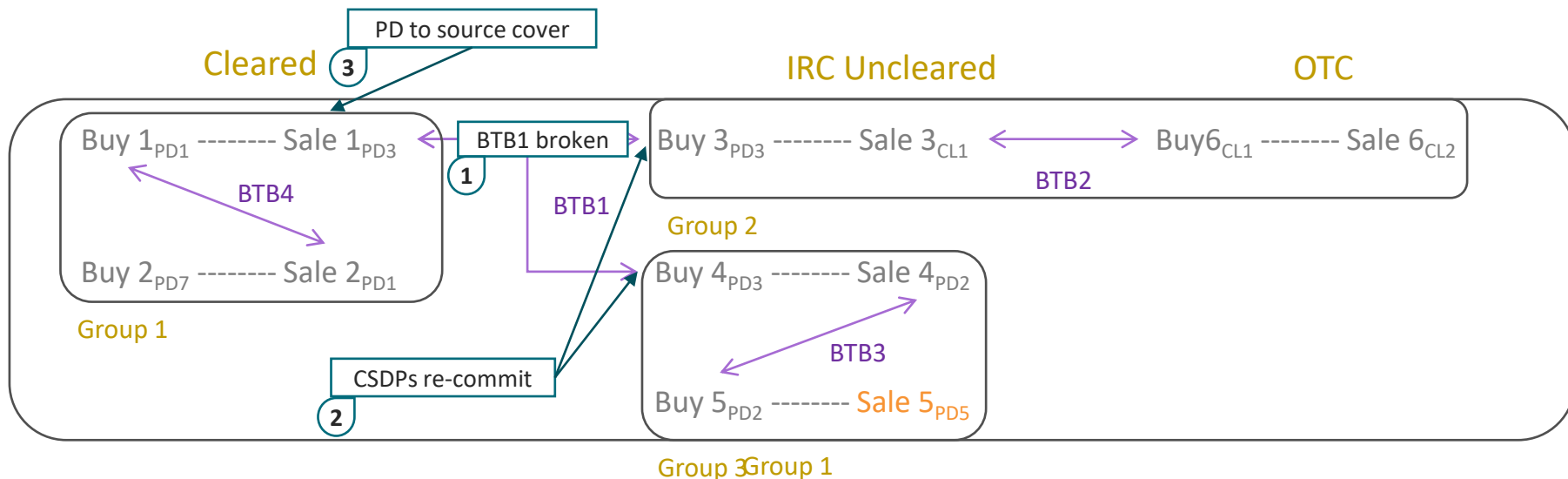
SCENARIO 1



SCENARIO 2

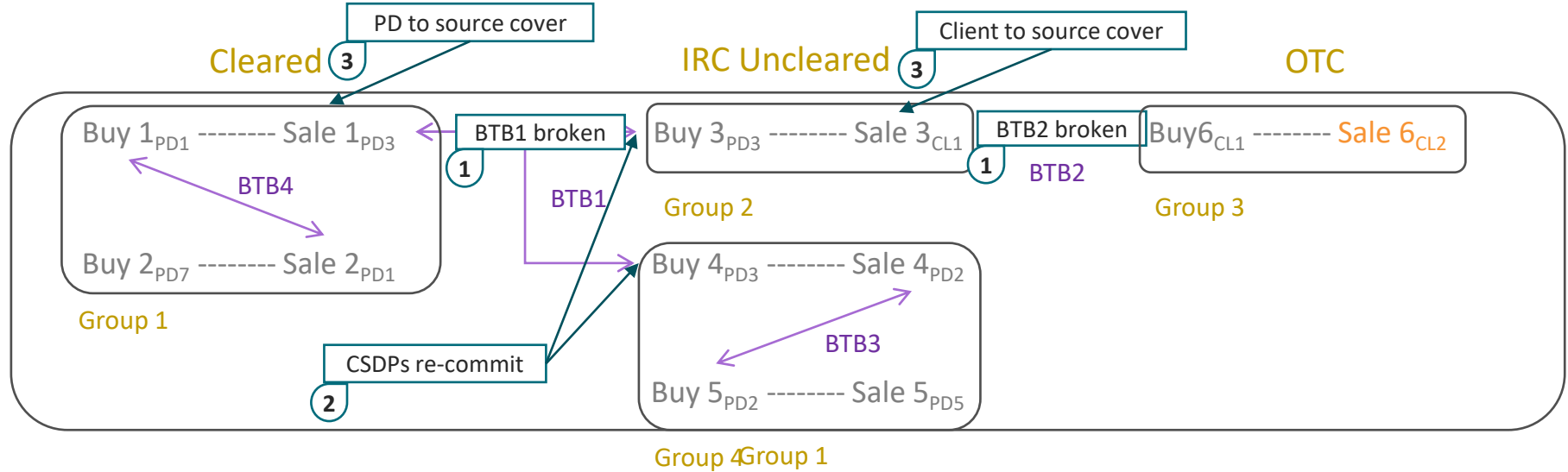


Scenario 1: IRC uncleared trade holding up group



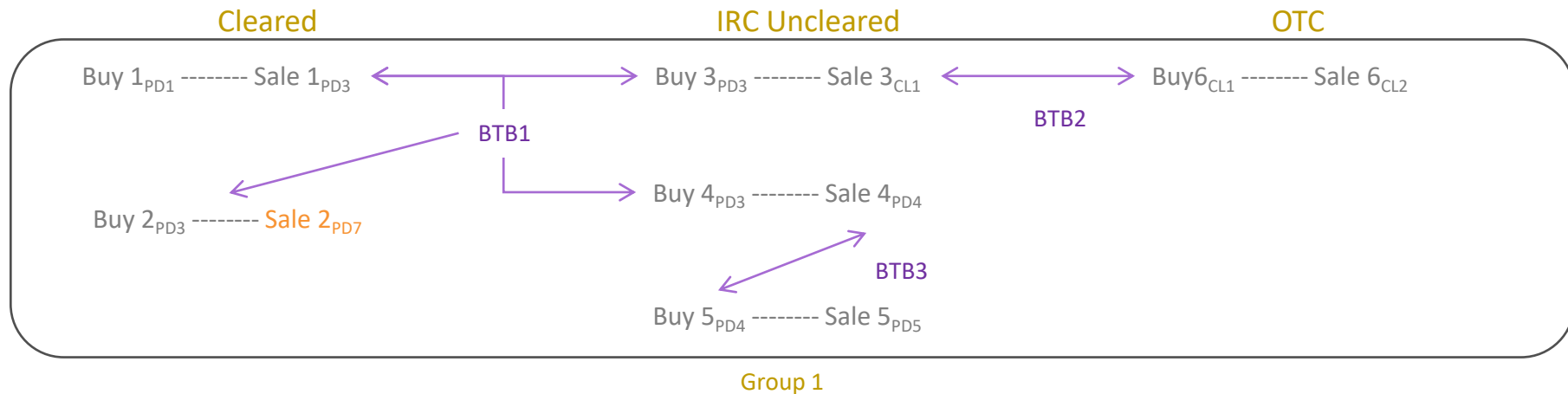
- At 13h00, IRC Uncleared Sale 5 is still uncommitted to, thus Strate will instruct PD3's CSDP to break BTB1, which will result in the breaking up the settlement group, Group 1
- Once links are broken, CSDPs will then re-commit to Buy 3 and Buy 4, assuming all the necessary funds are in place and available
- PD3 will then need to source cover for Sale 1 from their CM, if stock is not available, in order for enable settlement for all Cleared trades
- Cleared trades will not be linked to any trades other than dedicated cover trades booked to enable settlement of all Cleared trades

Scenario 2: OTC trade holding up group



- At 13h00, OTC Sale 6 has still not been committed to so Strate will instruct PD3 and Client1's CSDPs to break BTB1 and BTB 2 respectively
- Once links are broken, CSDPs will then re-commit to Buy 3 and Buy 4, assuming all the necessary funds are in place
- PD3 will then need to source cover from their CM for Sale 1 in order for enable settlement for all Cleared trades
- Client 1 will also need to source cover for Sale 3, however since the NT facility is not available to non-PDs Trade 3 the possibility exists that Trade 3 may fail

Scenario 3: Cleared trade holding up group



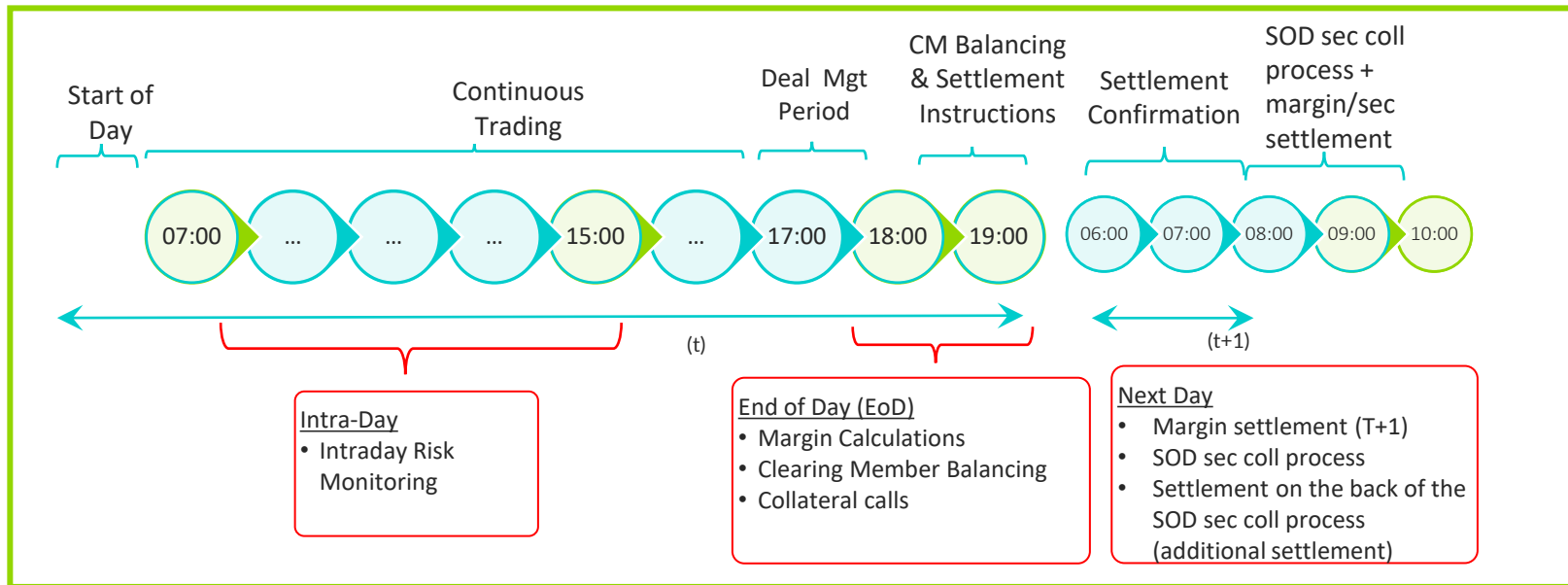
No links broken. CM to provide cover from NT as a last resort at 14h00

- At 13h00, group has not settled due to uncovered Cleared Sale 2
- Since the trade holding up the group is an Cleared trade, the CM will be responsible to provide the TM with cover either through available stock or through their access to NT to ensure that settlement of the trade occurs, hence no links will be broken.
- Settlement should be finalised by Strate’s final settlement run at 15h15

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Two core risk management processes are conducted daily by the CCP

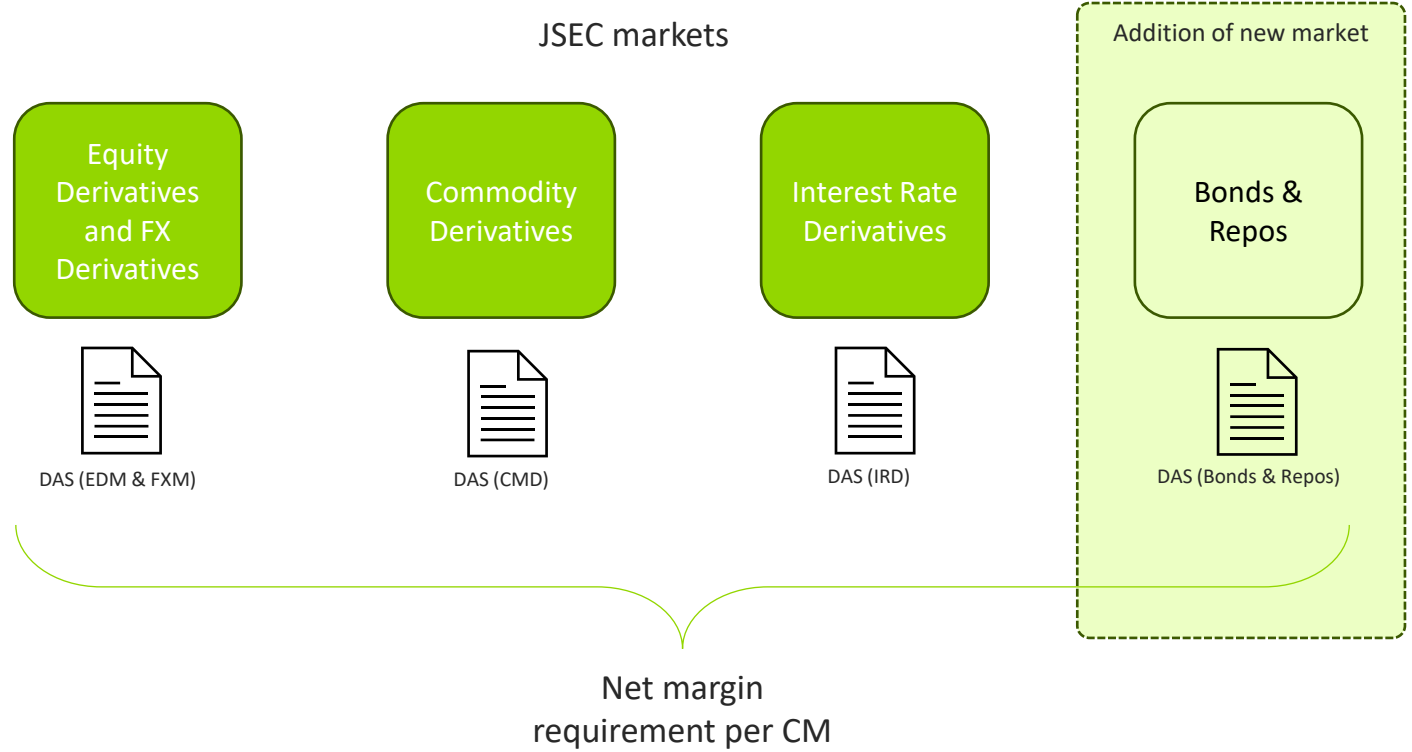
- EOD margin run** : Each day JSE Clear will run a single End-of-Day (EOD) margin run for IRD & Bond CCP markets. Margin calls are required to be settled by clearing members on T+1 (by 10h00).
- Intra-day margin run**: Additionally in extreme volatile markets JSE clear may elect to run an adhoc intraday margin call. Intraday margin call take place during the trading day and must be settled in cash before 15h00.



Time	EOD Risk management Process
Before 18:00	Final settlement run <ul style="list-style-type: none"> • Strate to complete the final settlement run for spot bond and repo market
18:00	Market Close <ul style="list-style-type: none"> • Cash bond & IRD market close
18:02	EOD process begins <ul style="list-style-type: none"> • JSEC sends eligible spot bond prices to STRATE CMS • JSE calculates IM and VM & fees per client and member account and aggregates at CM level (Bond CCP cleared trades will be included) • Clearing members run their EoD process. (CMs to include Bond CCP cleared trades) • JSEC sends exposure to STRATE CMS i.e Maximum security value that can be pledged for each client/TM (Exposure will include both IRD and bond CCP cleared trades) • JSE disseminates the EOD reports to CMs. (Reporting will include Bond CCP cleared trades)
After 20:00	<ul style="list-style-type: none"> • JSE prepares net settlement instructions for CMs, to be released next day at 6:00 am. (Bond CCP cleared trades margins and fees will be included)

Key notes:

- A separate daily account summary report to be sent out to CMs for the Bonds and Repos market.
- At EOD, margin requirements for the Bonds and Repos market will be rolled up into the net margin requirements per CM.



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1 Membership criteria and other considerations

- Clearing members require a liquidity facility from National Treasury.
- Clearing members to identify their onboarding requirements for clients and house TM.
- Clearing members are also required to establish new business operational relationships with their clients and bond trading desks, for ensuring effective settlements.

2 Publishing of cleared trades

- Cleared bond trades will be published via the API to GCMS; JSEC will leverage the current Nutron API, GCMS should be able to receive all key fields published on the trade e.g. cleared flag, Strate leg no's etc.
- Real time status intimations for cleared bond trades will be published to GCMS; GCMS will be required to update trades as and when intimations are received.

3 Daily monitoring of uncommitted trades

- Daily monitoring of uncommitted trades to be developed by Clearing members.
- Ability to publish intraday notifications to TM's for uncommitted trades example; system generated emails, SMS's, WhatsApp notifications etc.
- System ability to issue penalties.

4 Securities collateral

- Development of securities collateral functionality and reporting.
- Additional settlement on the back of the SOD securities collateral process.

5 End of Day

- EOD margin replication, EOD net settlement for all derivative markets & Bond CCP market.
- Reporting, new reports for cleared bond trades i.e. Daily account summaries, margin report etc. (timing will be the same as the IRD market)
- Replication of Fees aligned to the daily process on the IRD market

- Settlement Authority uses an application called Clear Insights in conjunction with Nuclears to monitor settlement.
- Real-time dashboard to support settlement of bonds and repos:
 - Real-time monitoring of settlement status updates.
 - Ability to filter on and actively manage all uncommitted trades.
 - System enabled to receive comments from members in order to track settlement progress.
 - Depending on trade status the system color codes the trades for the operational team to take the required action i.e. follow-up with members on uncommits.
 - Uncommitted trade notifications are issued from Clear Insights, this is automated based on settlement times that has been built into the system.
 - Penalties are issued from Clear Insights, based on non-commits in relation to the rules.

Example of real-time settlement monitoring dashboard

Status	Commit...	r	Member	Market	Exchange Ref?	Trade Leg	Strate Code	Entered	Reported	Buy/Sell	Instrument	Quantity	Rate %	Price	Consideration	Settlement Date	Reason For Uncommit	Exchange Match Ref	CSDP	Col	Co
UNSETTLED	Uncommitted		IRC					2023-11-01 14:20:50	Nov 1, 2023	SELL	R2037					Mar 15, 2024	AWAITING CSDP FEEDBACK		ABSA		
UNSETTLED	Uncommitted		IRC					2024-03-08 16:37:59	Mar 6, 2024	SELL	R2032					Mar 15, 2024	PEND-LACK - 2024-03-12 07:11		SBSA		

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Conclusion and next steps:

- One-on-one sessions with Clearing members, JSEC will contact Clearing members to request availability.
- Market participants to review the CCP design and requirements shared thus far and engage directly with JSE on any questions or queries they may have.
- Market participants to start mobilising their internal teams to commence internal design and system development work.

UPCOMING MARKET WORKSHOP DATES FOR 2024:

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