CCP clearing for the South African bonds and repo markets

Market workshop – Session 2 26th June 2023



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Bonds CCP | Agenda



- Introduction and recap: Daily processes, account structures, and trade novation
- Settlement management
 - Overview of current bonds and repo settlement model
 - Settlement of CCP cleared trades
 - Settlement rules and processes
 - Back-to-back links and settlement groups
 - Exception handling processes
 - Trade cancellations
- Summary: Key capabilities to be developed by market participants
- Conclusions and next steps
- Q&A

Bonds CCP | Background



- South Africa (SA) is fast falling behind the rest of the world in transforming and improving its capital market infrastructure SA one of the few jurisdictions globally that does not have CCP clearing for its cash equities and bonds markets.
- Developing a domestic bonds and repo CCP clearing service will go a long way in improving the credibility of SA
 capital markets against the current challenging macro-economic conditions, declining sovereign rating, and recent
 FATF grey listing.
- 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 close to 40% (and rising) of total trading activity.
- JSE Clear, a fully independent and internationally recognised CCP, is well positioned to leverage its existing CCP clearing infrastructure and integration with clearing member banks to provide a timeous and cost-effective domestic bonds and repo CCP clearing service for the SA.
- The 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.
- JSE Clear has commenced with the detailed design and requirements of a CCP clearing service for the South African cash bonds and repo markets with a go-live targeted for Q1 2025.



Bonds CCP | Introduction



Primary objectives of the Bonds CCP market workshops include:

- 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 2023:

- ✓ Session 1 11th May
- Session 2 26th Jun
- Session 3 12th Jul
- Session 4 8th Aug
- Session 5 20th Sep
- Session 6 11th Oct
- Session 7 8th Nov

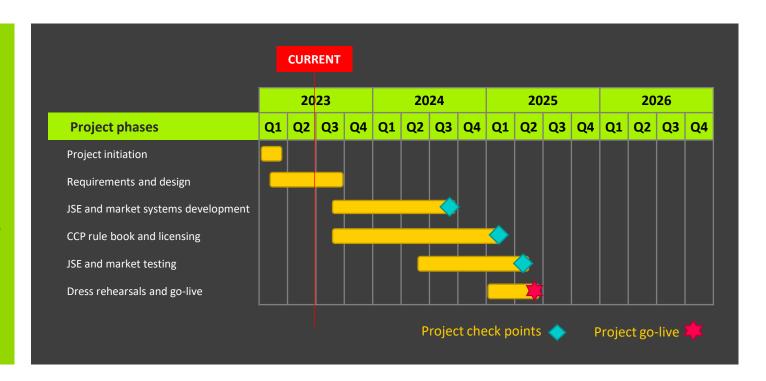
Agendas to be sent out two weeks prior to the workshop



Bonds CCP | Indicative timelines – Phase 1



- Project progressing well and on track for H2 2025 go-live.
- Requirements and design of the Bonds CCP targeted for completion in Q3 this year.
- Market participants to start mobilising their internal teams to commence internal design and system development work in Q3 2023.

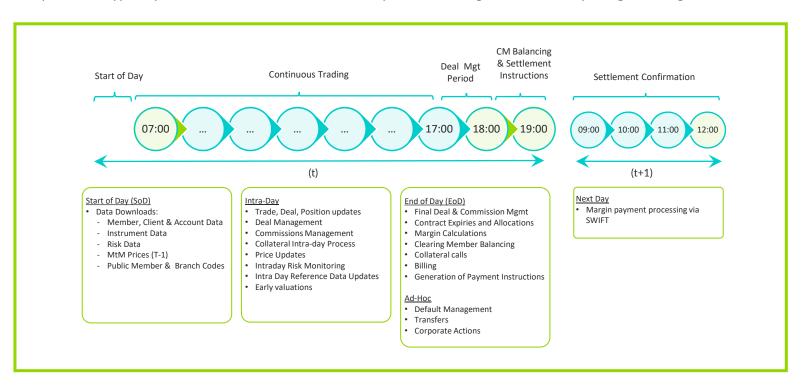


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Bonds CCP | Recap: Daily processes



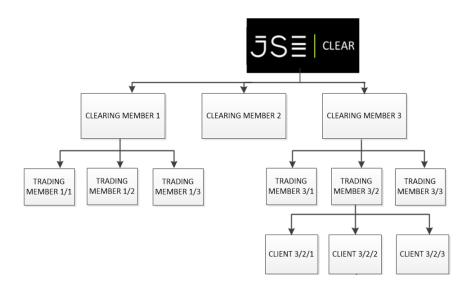
Daily CCP operations typically involves trade novation, deal and position management and daily margin management.



Bonds CCP | Recap: CCP risk management structure



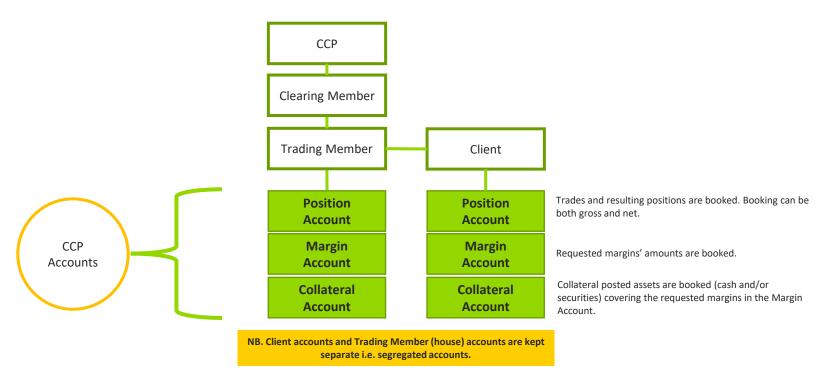
- The Clearing House(CH) represents the highest hierarchical level and is the CCP clearing business of the JSE i.e. JSE Clear
- A Clearing Member (CM) is a direct member of the Clearing House and has legal and contractual responsibility to uphold the rules of the Clearing House
- A Trading Member (TM) has a direct relationship with one or multiple CMs and has no responsibility to the CH other than through the CM
- A Member Client is associated directly with one or multiple TMs



Bonds CCP | Position account structures and netting

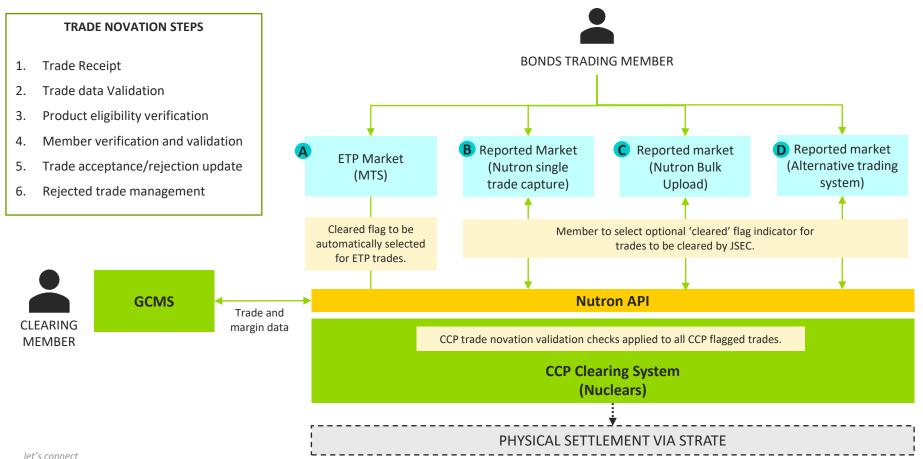


CCP has generally three levels for a specific clearing account i.e. Position, Margin & Collateral account



Bonds CCP | CCP trade novation process





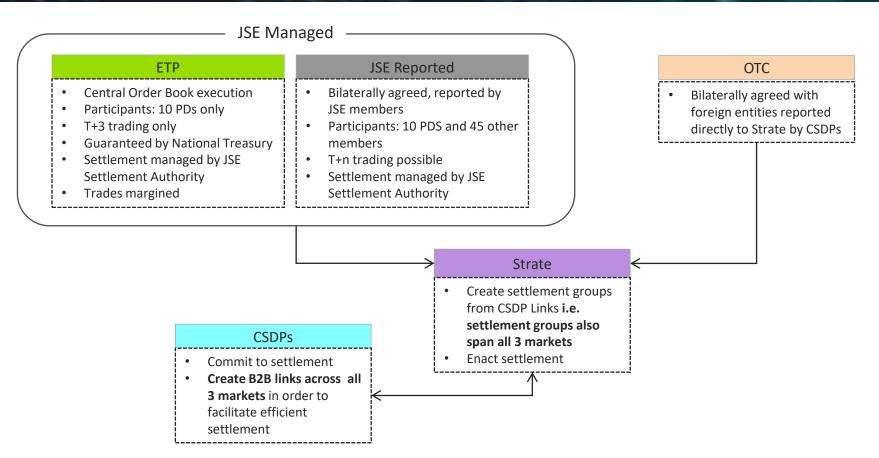
Bonds CCP | Agenda



- Introduction and recap: Daily processes, account structures, and trade novation
- Settlement management
 - Overview of current bonds and repo settlement model
 - Settlement of CCP cleared trades
 - Settlement rules and processes
 - Back-to-back links and settlement groups
 - Exception handling processes
 - Trade cancellations
- Summary: Key capabilities to be developed by market participants
- Conclusions and next steps
- Q&A 10min

Bonds CCP | Current SA bond market structure





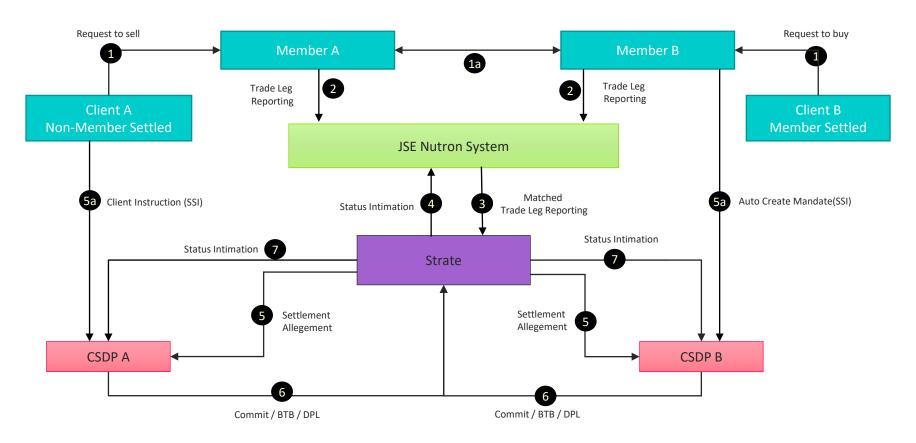
Bonds CCP | Current settlement model principles



- ETP (Electronic Trading Platform)
 - T+3 trading only
 - No settlement failures of ETP trades
 - National Treasury guarantees as lender of last resort
- IRC (Interest Rates and Currency Derivatives)
 - Settlement Cycles vary (same day, i.e. T+0 to T+n)
 - Settlement monitored and managed by JSE Settlement Authority to limit settlement failures
- All markets
 - Alignment as far as possible between ETP, IRC and OTC markets in terms of rules
 - Back-to-back links will be used across ETP, IRC and OTC markets

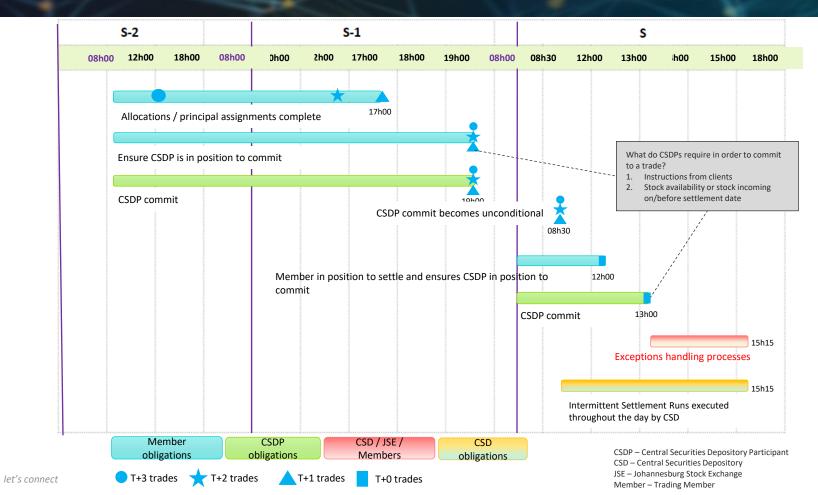
Bonds CCP | Current bilateral settlement flow





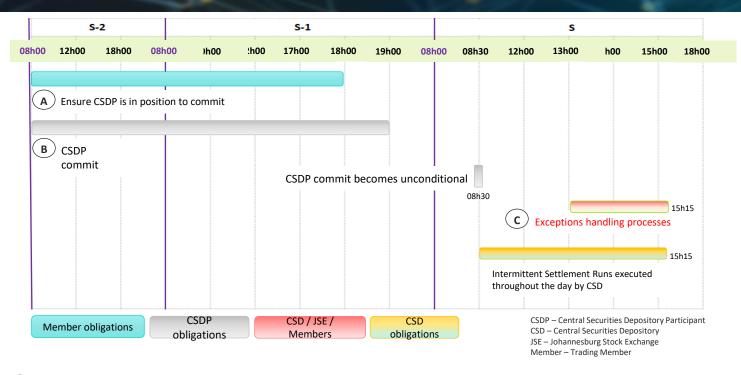
Bonds CCP | Current settlement timelines (IRC)





Bonds CCP | Current settlement timelines (ETP)





- Members have up until 18h00 on S-1 to ensure that their CSDP is in a position to commit to their trade, that is, members need to ensure that stock or cash is available at their CSDP.
- CSDPs to commit to trade legs by latest 19h00 on S-1. (The JSE and Strate continuously monitoring and follow up on all uncommitted trades with the relevant members and CSDPs, prior to the cut-off time on S-1, leading up to the cut-off time of 13h00 on S.)
- C At 13h00 on S the final settlement exceptions handling processes begin, whereby all remaining unsettled trades are isolated from possible settlement groups. Members will be required to source cover from National Treasury to allow trades to be committed to.

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Bonds CCP | Key principles for CCP cleared trades



Clearing Principles

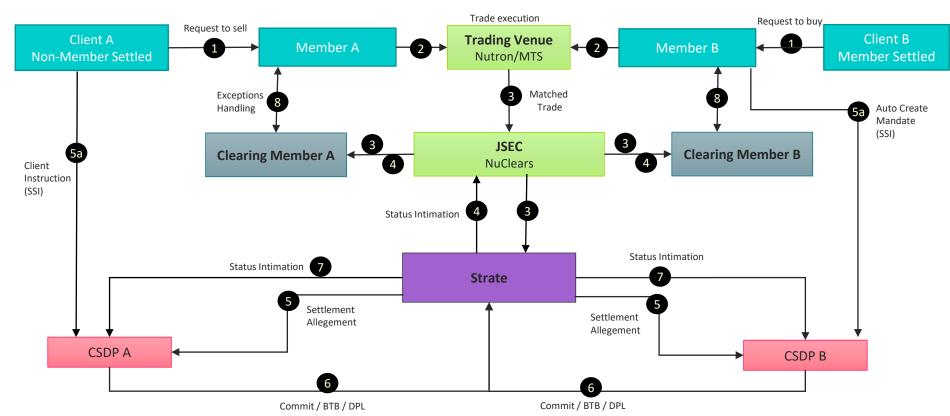
- Eligible participants
 - Phase 1: PDs and IDBs
 - Phase 2: Other TMs and Clients
- Clearable trades:
 - All ETP Trades
 - Trades elected to be cleared in the reported market
- Clearable instruments
 - Will be determined by JSEC risk team
 - Government bonds only for Phase 1
- All settlement cycles will be cleared
 - Same day to T+n
- Margin will be applied to all cleared trades

Settlement Principles

- Alignment as far as possible between cleared, uncleared and OTC markets
- Back-to-back links will be used across cleared, uncleared and OTC markets
- No settlement failures of cleared trades
- All Clearing Members required to have access to National Treasury liquidity as last resort

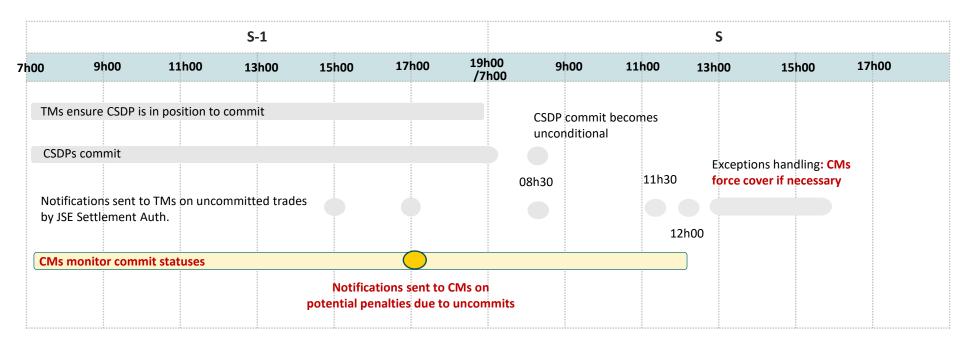
Bonds CCP | Settlement flow for CCP cleared trades





Bonds CCP | Settlement timelines for CCP cleared trades

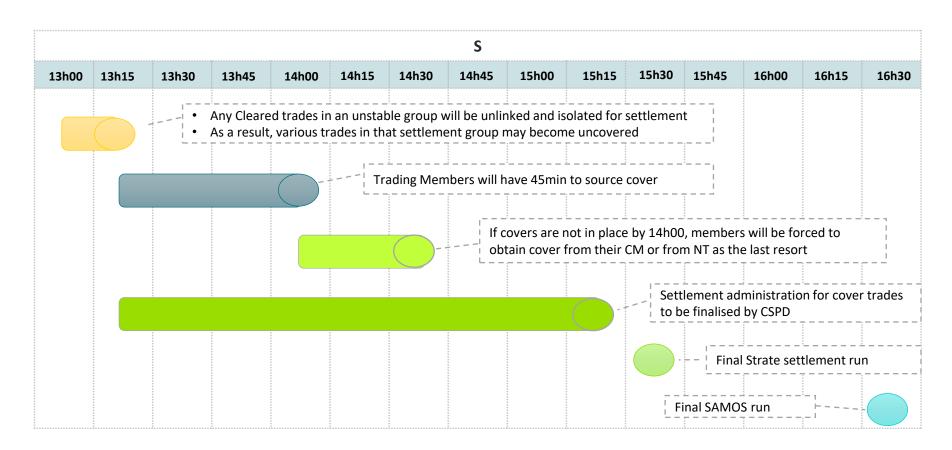




- Notifications sent to CMs from Clear Insights, include all client info on one report
- Exceptions handling for Cleared trades prioritised (like ETP trades are today)
- CMs will require access to NT liquidity as final step in exceptions handling
- Penalties will be instituted and charged to CMs for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

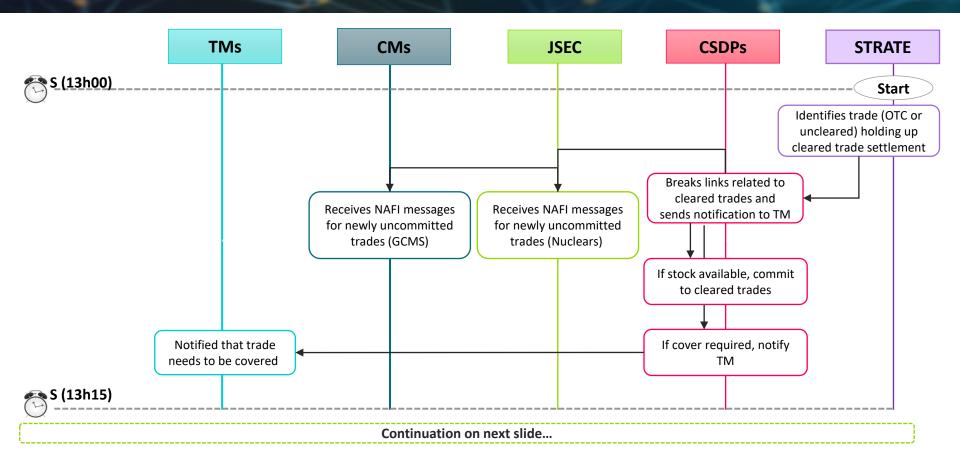
Bonds CCP | Settlement exceptions handling process for CCP cleared trades





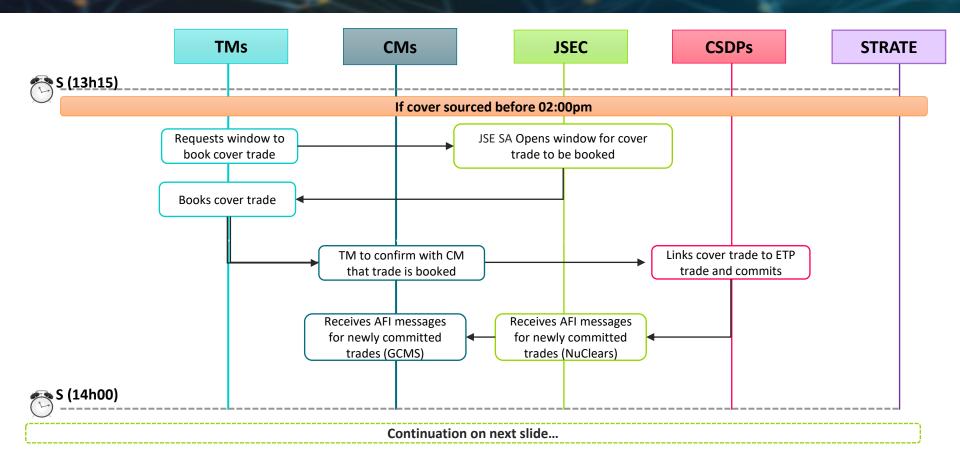
Bonds CCP | Exceptions handling process | Detailed process flow





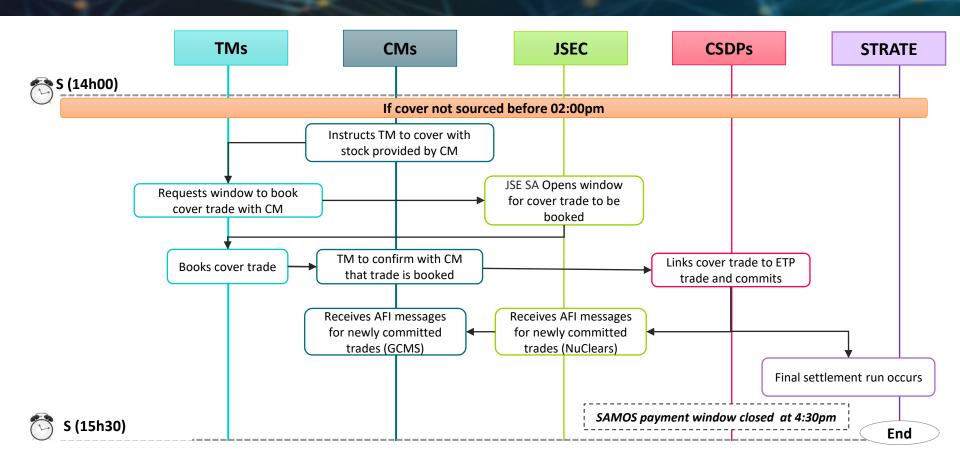
Bonds CCP | Exceptions handling process | Detailed process flow (cont.)





Bonds CCP | Exceptions handling process | Detailed process flow (cont.)





Bonds CCP | Back-to-back (BTB) linking process for settlement



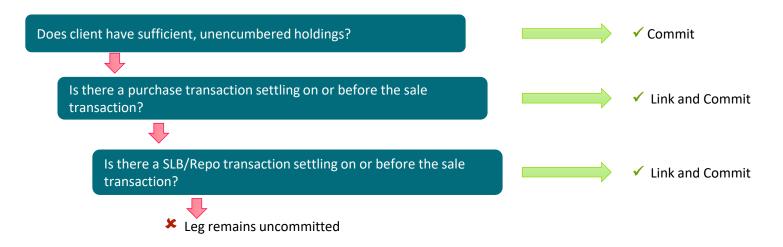
- BTB is a risk mitigation tool used by the CSDPs to link transactions with the dependencies
- The following transactions can be linked by the CSD Participants:

	Cleared (ETP & IRC)	IRC Uncleared	Off-market	SLB
Cleared (ETP & IRC)	CHE CONTROL OF THE CO			
IRC Uncleared				
Off market				
SLB				

Bonds CCP | Back-to-back (BTB) linking process for settlement (cont.)



- 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:



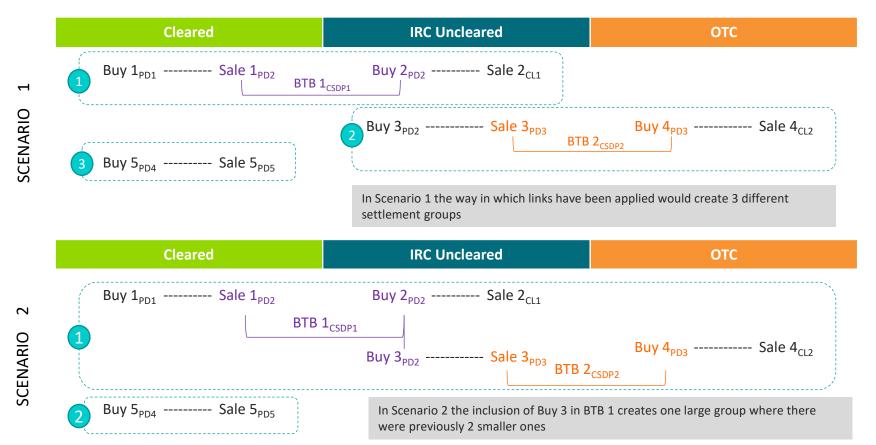
Bonds CCP | Settlement Groups



- Once CSDPs have created the back-to-back links necessary to conditionally commit to the settlement of trades, Strate's system automatically creates settlement groups for more efficient settlement
- Settlement groups consist of all trade legs that have back-to-back links applied to them within a specific ISIN for a particular settlement date
- Unlike back-to-back links that can only be applied to one custody account, settlement groups can span across members or clients and CSDPs as it is possible for settlement groups to have multiple back-to-back links within the groups, thus settlement groups can get quite large
- Only when all transactions within a group are committed and total deliveries matches total receives (Cash and Securities), will the group move forward for settlement

Bonds CCP | Back-to-back links and settlement groups

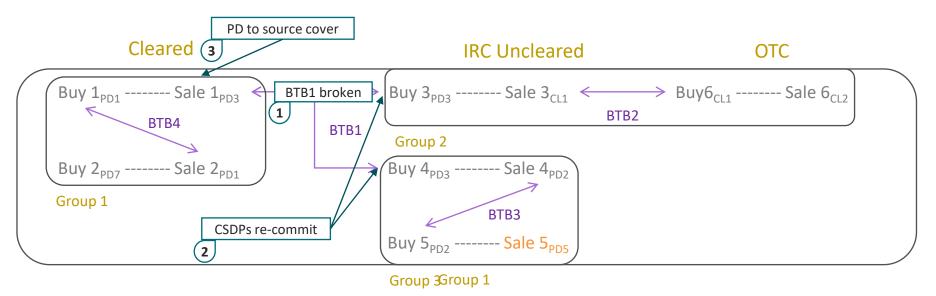




Bonds CCP | Example of exceptions handling processes



Scenario 1: IRC uncleared trade holding up group

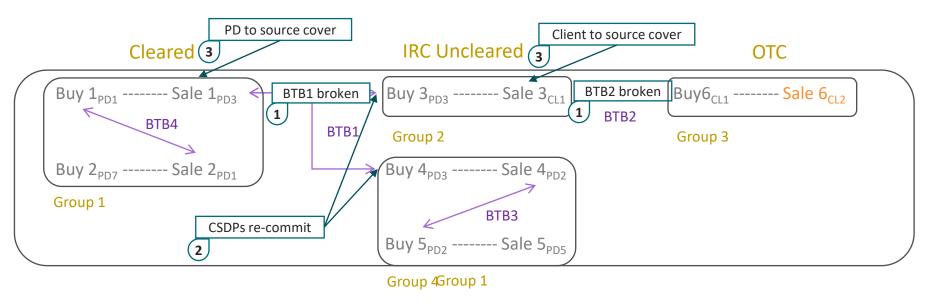


- At 13h00, IRC Uncleared Sale 5 is still uncommitted to, thus Strate will instruct PD3's CSDP to break BTB1, which will result in the breaking up the settlement group, Group 1
- Once links are broken, CSDPs will then re-commit to Buy 3 and Buy 4, assuming all the necessary funds are in place and available
- 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

Bonds CCP | Example of exceptions handling processes (cont.)



Scenario 2: OTC trade holding up group

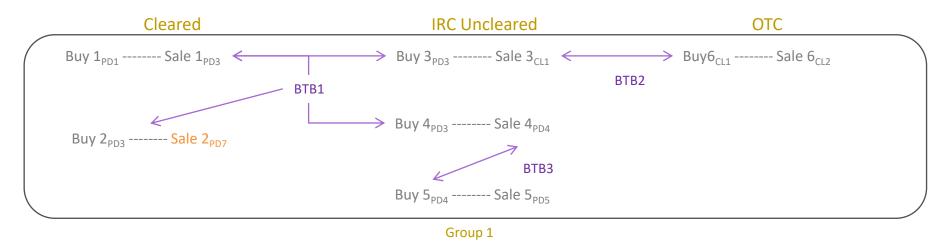


- At 13h00, OTC Sale 6 has still not been committed to so Strate will instruct PD3 and Client1's CSDPs to break BTB1 and BTB 2 respectively
- Once links are broken, CSDPs will then re-commit to Buy 3 and Buy 4, assuming all the necessary funds are in place
- PD3 will then need to source cover from their 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

Bonds CCP | Example of exceptions handling processes (cont.)



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

Bonds CCP | Trade cancellations



ETP Trade Cancellations:

- Only cancellations on T will be allowed
- As ETP is anonymous central order book trading, any cancellations will need to be approved by JSE Market Regulation
- If approved CSDPs will be asked to uncommit to trades so that cancellations may be processed

IRC Cancellations

- All trades which need to be cancelled or reallocated should be done before settlement day
- No cancellations or reallocations are allowed on S (with the exception of same say trades)
- Member's need to request that their CSDP lift their commit prior to processing the cancellation in order for the cancellation to be properly processed

NB. Any cleared trades not cancelled by end of day T, will be margined and TMs will be liable for the margin on T+1

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Bonds CCP | Primary settlement management capabilities to be developed $\overline{J}S \equiv ||$

No.	Capability	Trading Members	Strate	CSDPs	Clearing Member
1	The ability to select the 'cleared' indicator for reported bonds and repo trades when reporting to the JSE.	✓			
2	The ability to receive house and/or client trades that are selected for CCP and monitor trade exposures in their GCMS system.				✓
3	The ability to receive cleared/non-cleared indicator into settlement system.		✓	✓	
4	The ability to break BTB links between cleared and non-cleared trades.		✓	✓	
5	The ability to priorities commits for all cleared trades.		✓	✓	
6	Liquidity lines from NT (via PD banks) to facilitate cover trades for trading members/clients.				✓
7	The ability to monitor settlement commits in real-time and chase- up with trading members/clients for commits based on settlement cut-off times.				✓
8	The ability to provide and force cover on trading members/clients in the event of commit cut-off times being reached.				✓

NB. The list above only highlights the primary settlement management capabilities to be developed by market participants and is not exhaustive. A formal and exhaustive list of all clearing, settlement and risk management capabilities to be shared with market participants in due course.

Bonds CCP | Agenda



- Introduction and recap: Daily processes, account structures, and trade novation (HK) 10min
- Settlement management
 - Overview of current bonds and repo settlement
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- Summary: Primary settlement management capabilities to be developed
- Conclusions and next steps
- Q&A 10min

Bonds CCP | Conclusion and next steps



Conclusion and next steps:

- JSE to continue with the detailed design and requirements of the CCP with targeted completion in Q3 this year.
- 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 in Q3 2023.

Topics to be covered in future 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

Topics for next session – session 3

Thank you

Q&A

...for further info or questions, please contact:

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Alicia Greenwood (CEO JSE Clear) – Aliciag@jse.co.za; or



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