CCP clearing for the South African bonds and repo markets

Market workshop – Session 10

21st May 2024

JSE CLEAR

let's connect

Bonds CCP | Agenda

- **Introduction and Project Update**
- Recap: Clearing Member Impacts
- ETP Trade Flow
  - Current ETP trade flow vs ETP trade flow in Bond CCP
  - Trade Recon process between market participants
- Settlement Management
  - End of day margining process & reporting
  - CCP daily risk management processes
- Conclusion and next steps

Bonds CCP | Market workshop sessions

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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 10 – 21st May
- Session 11 – 18th June
- Session 12 – 23rd July
- Session 13 – 20th Aug
- Session 14 – 17th Sept
- Session 15 – 22nd Oct
- Session 16 – 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 ✓
- ETP trade flow & trade reconciliation
- Risk management and margining ✓
- Fees and billing
- Reporting
- Default management ✓
- Clearing membership criteria ✓
- CCP rules, policies and procedures

Bonds CCP | Recap: Primary drivers for CCP clearing

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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.

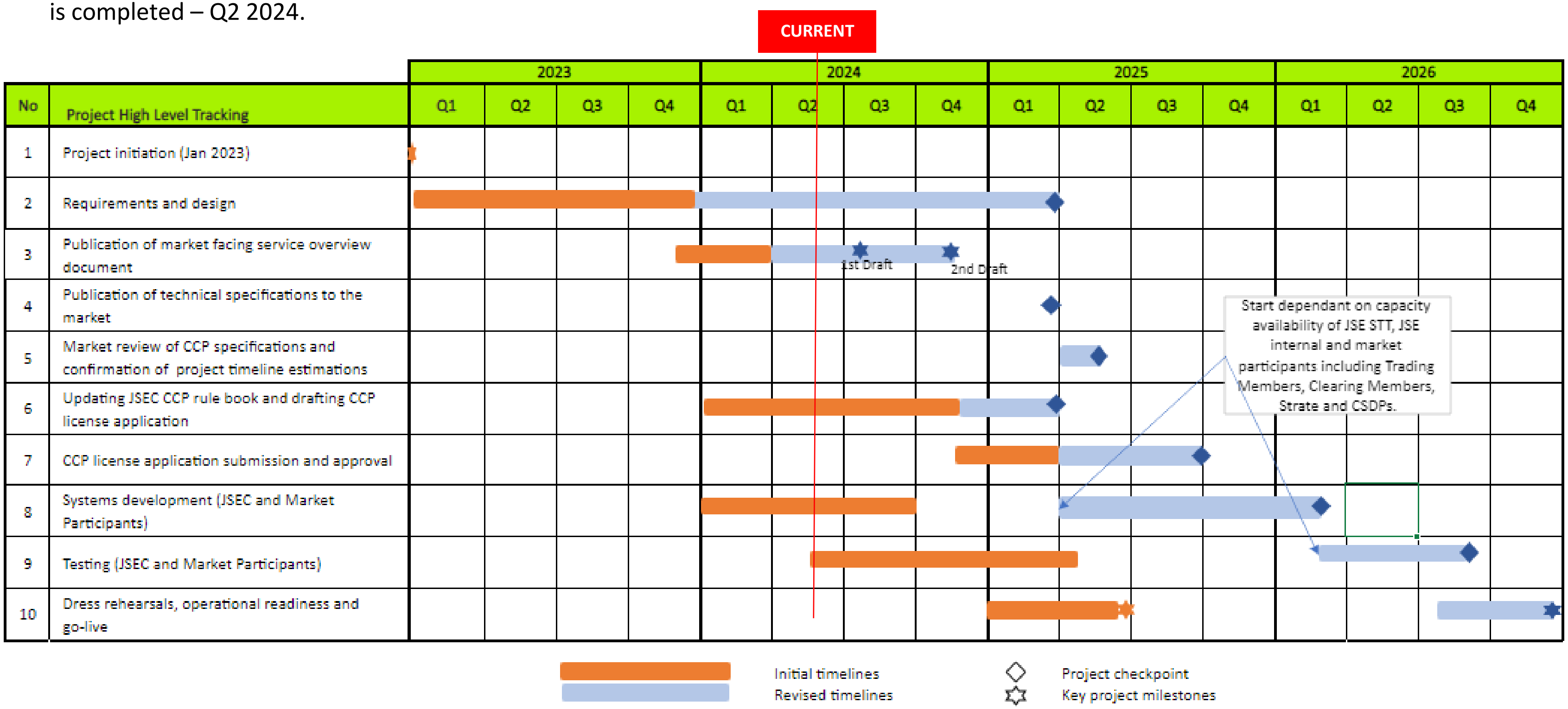
Why JSE Clear?

- 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.

Bonds CCP | Revised timelines (indicative)

- 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.



Bonds CCP | Agenda

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Bonds CCP | Clearing Member Impacts

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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 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

Bonds CCP | Clearing Member Impacts – Fields for daily monitoring

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*Fields available on API	
Cleared Flag (guaranteed flag)	Y= Cleared Trade
Trade Execution Venue	MTS (ETP market) IRC (Reported market)
JSE Exchange Reference No.	Generated by JSE on receipt of cleared trade
External Trade ID	MTS Trade ID
Strate Trade Leg No.	Generated by Strate on successful receipt on trade
Settlement Date	Settlement date of trade
Trade Statuses	Unmatched, Matched, Unconfirmed, Unsettled-Accepted, Unsettled-Committed, Settled

*subset of fields in the API message

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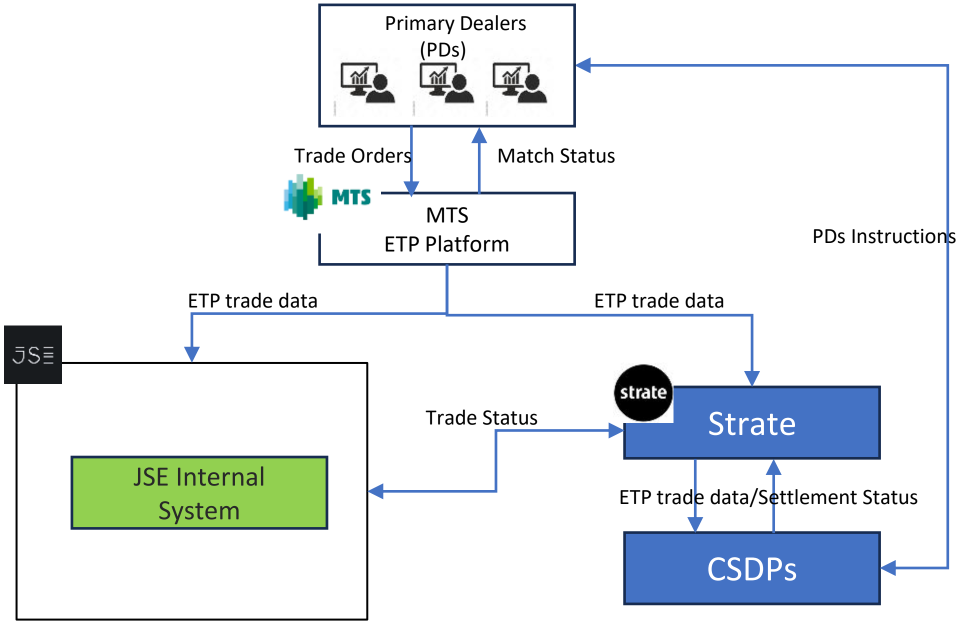
Current ETP trade flow :

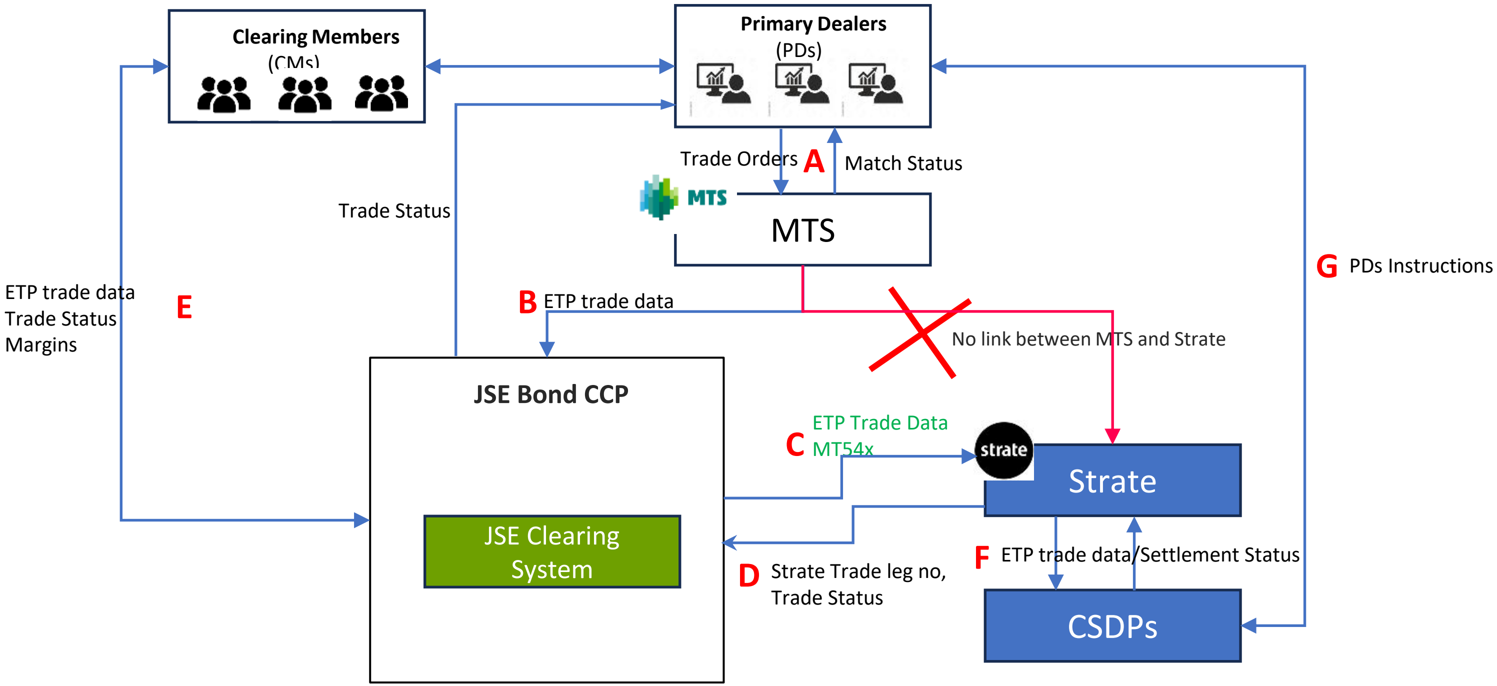


Key Notes

1. Currently, both JSE and Strate receive the ETP trade data from the MTS-ETP platform.
2. Strate generates the MTS Trade ID. (10 digit no) and shares it with the market participants (JSE and CSDPs etc.) as Strate trade leg no.
3. Guaranteed flag for MTS trade messages shared between the participants is marked as “Y”
4. Strate and CSDPs priorities the settlement of ETP trades against the reported trades using BPID and MIC codes.
5. Strate run a recon process with MTS and JSE at EOD.
6. National treasury act as lender of last resort for the settlement of ETP trades.

To be process flow: Bond CCP trade flow

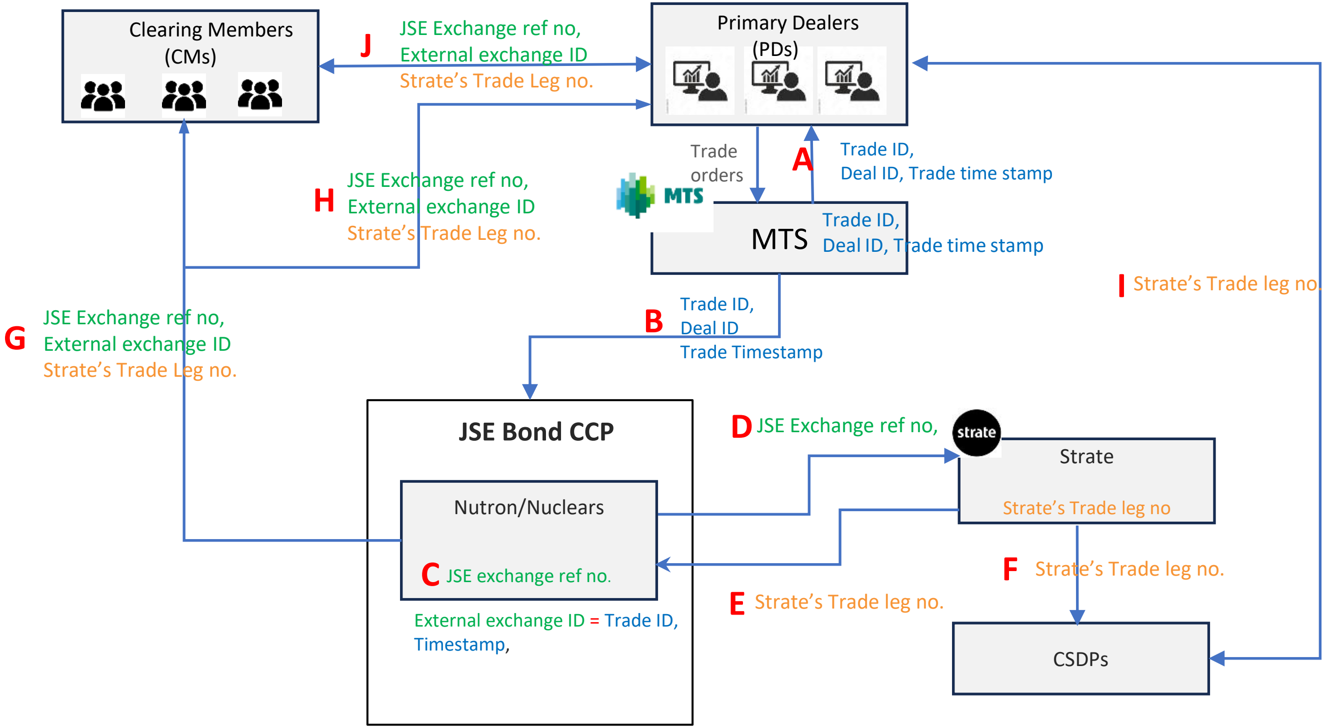
Note: Link between MTS-ETP platform and Strate will be discontinued. JSE clear will send the ETP trade data to Strate in the same way it sends the current reported bond trade data using swift messages.



Bond CCP | Current ETP trade flow vs ETP trade flow in Bond CCP

	Current MTS-ETP Trade	Bond CCP Solution
Trade Flow	• Currently, both JSE and Strate receive ETP trade data from the ETP platform.	• Only, JSE will receive ETP trade data from MTS, and JSE will forward the ETP trade to Strate. • JSE will forward the ETP trade data to Strate using the same MT messages as used for the reported trade currently.
Strate Trade Leg no.	• Strate generates a Strate trade leg no. for MTS-ETP Trades by concatenating the MTS trade ID and date field e.g. 034514136	• Strate to generate Strate trade leg no. for MTS-ETP trades using the same logic as is currently used for reported trades e.g. 0920935702
Guaranteed flag	• Guaranteed flag = Y, sent to Strate and CSDPs currently indicates that the trade was executed on ETP trading platform.	• Guaranteed flag = Y, sent to Strate and CSDPs will indicate that the trade is being cleared via JSE Clear. This will be applicable to trade executed via ETP or in IRC reported markets.
Settlement priorities	• Strate and CSDPs prioritise the settlement of ETP trades against the reported trades using BPID and MIC codes.	• Strate and CSDPs to prioritise the settlement of cleared trades against the reported trades using the Guaranteed field (cleared vs non-cleared) in the MT messages e.g. Y= Cleared & N = Non-cleared
Trade Recon process	• Strate run a recon process with MTS and JSE at EOD.	• Strate doesn't need to run a recon process with MTS. The Recon process between Strate – JSE Clear and JSE-MTS will continue. • The timing of the Recon process to be confirmed with Strate.

Bond CCP| ETP Trade Flow – Different Trade IDs applicable for Recon process



Key Note:

1. Current Trade Recon process between JSE Clear, Strate & CSDPs should remain same. i.e **Strate's Trade leg no**. will remain the primary field in recon process.

2. New Trade recon process between JSE Clear, Clearing members, Trading members will be required.

3. **H,G & J** : JSE clearing system will publish the below trade IDs in the trade data to clearing member and trading members(PDs) which can be used for reconciliation purpose:
    1. JSE exchange ref. no. (generated at JSE)
    2. MTS trade ID.
    3. Strate's Trade leg no.

Legend: Different colors in the trade ID text shows its origin.
IDs in green is originated at JSE, blue at MTS & orange at Strate.

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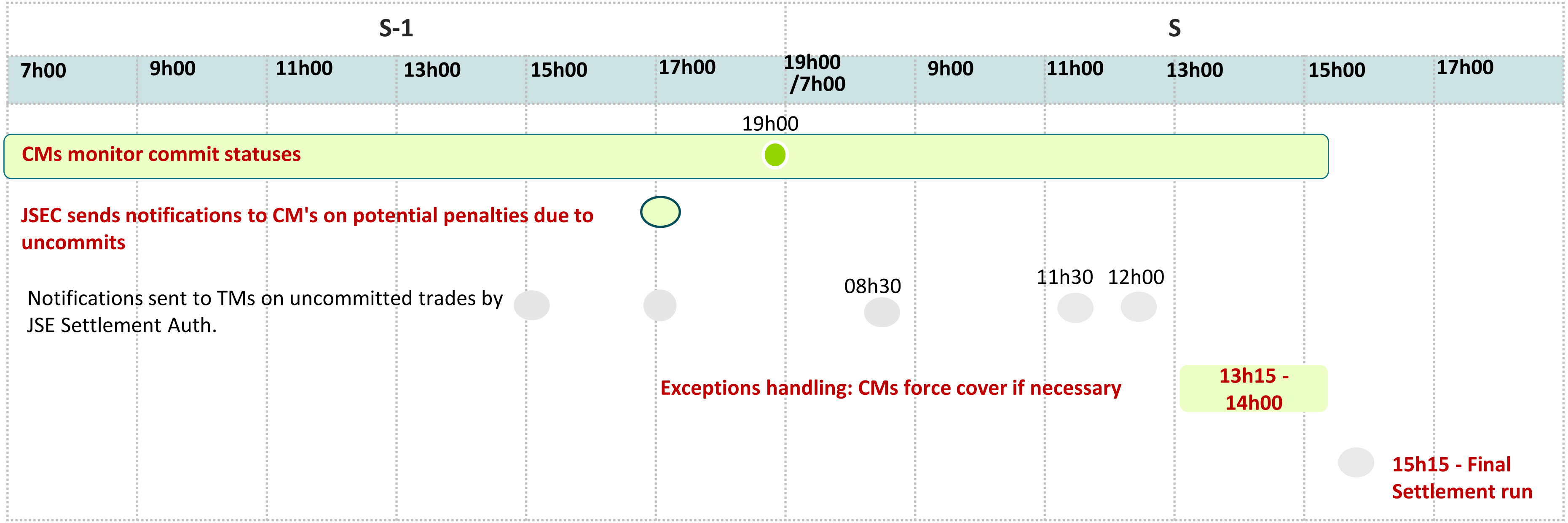
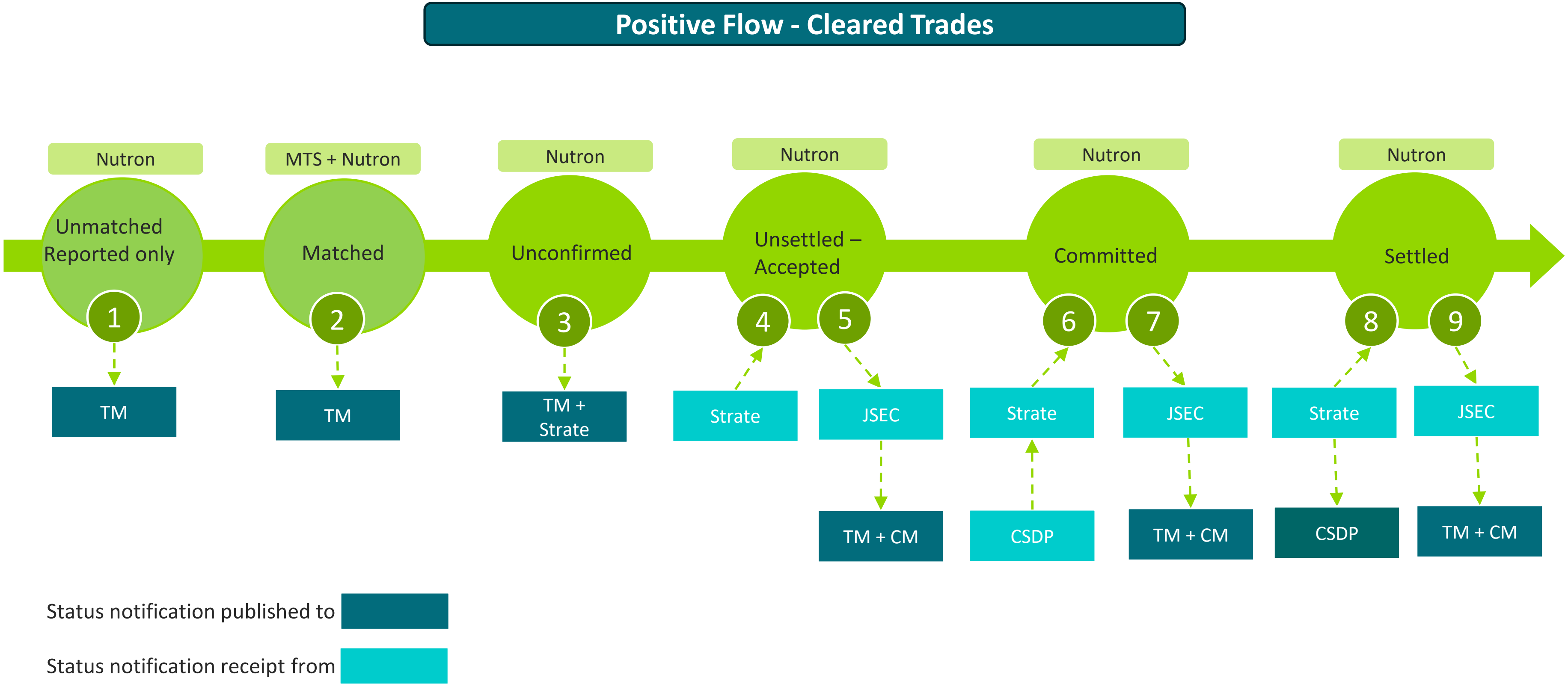
Bonds CCP | Clearing Member daily monitoring of CCP cleared trades

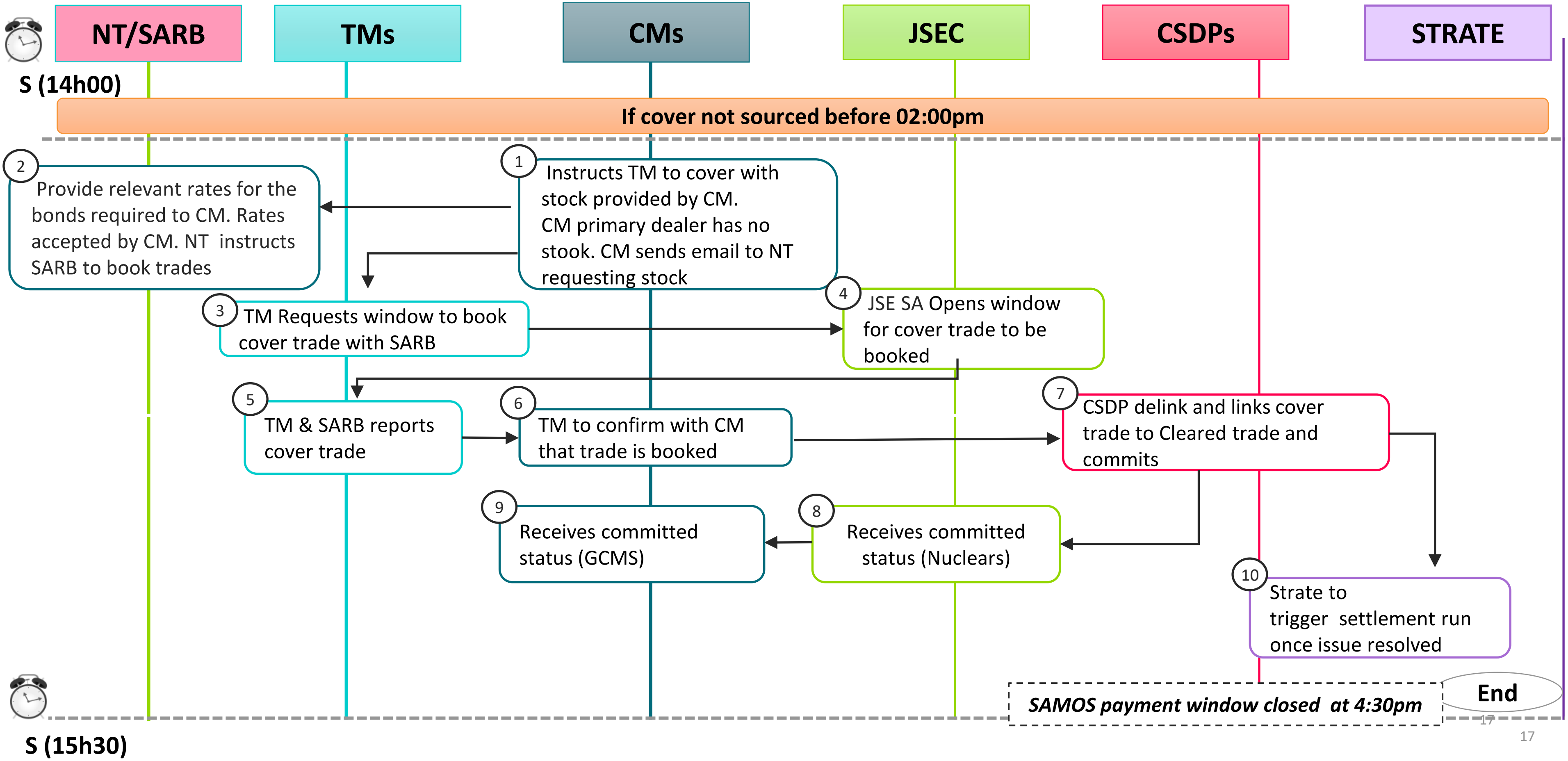


- Clearing Members to monitor commit statuses from 07h00 on S-1 to 15h15 on S
- JSEC will disseminate notifications to Clearing members on potential penalties due to uncommits at 17h00 on S-1
- Currently Settlement Authority sends email notifications to TM's on uncommitted trades, these notifications will continue for CCP cleared trades
- Recommend Clearing members to have an open channel of communication with its trading members regarding the status of cleared trades to avoid penalties
- Exceptions handling : Clearing members to force cover if necessary

Bonds CCP | Positive Trade Flow Statuses



Bonds CCP | Clearing member exceptions handling | TM does not have stock



Bonds CCP | Clearing member exceptions handling | TM does not have cash

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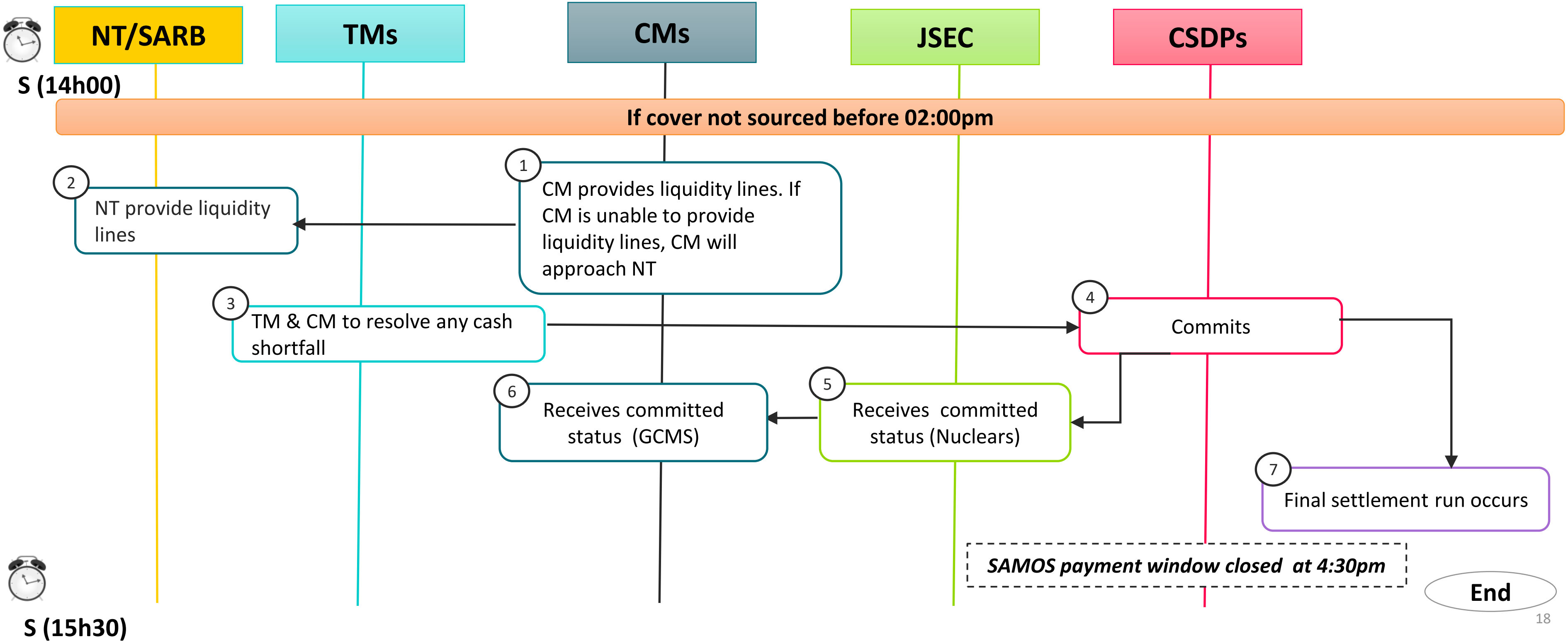

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Bonds CCP | End of day margining process(indicative timelines)

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EOD Risk Management Process

Final settlement run
- Strate to complete the final settlement run for spot bond and repo market

- 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)

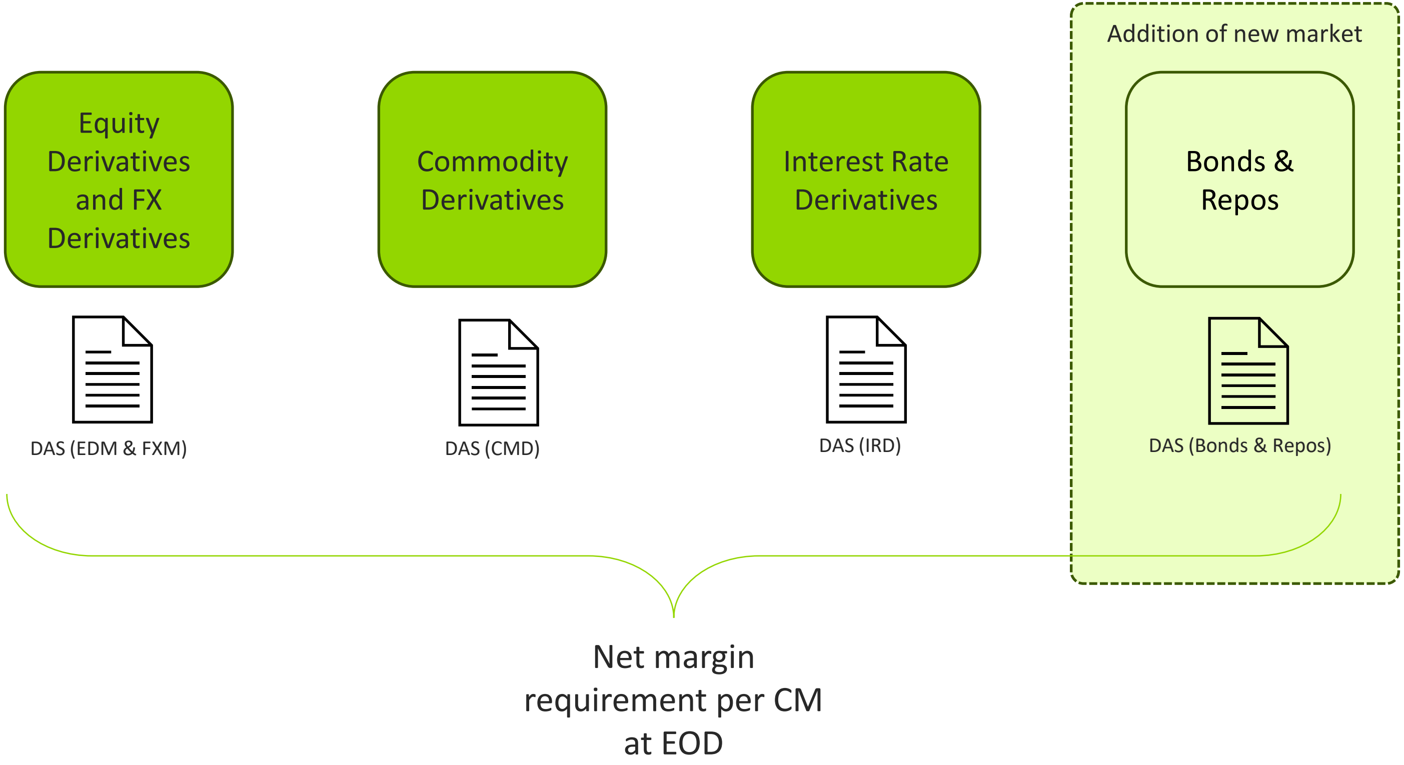
18:00 — 18:02 — 20:00

Market Close
- Cash bond & IRD market close

EOD process begins
- 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)

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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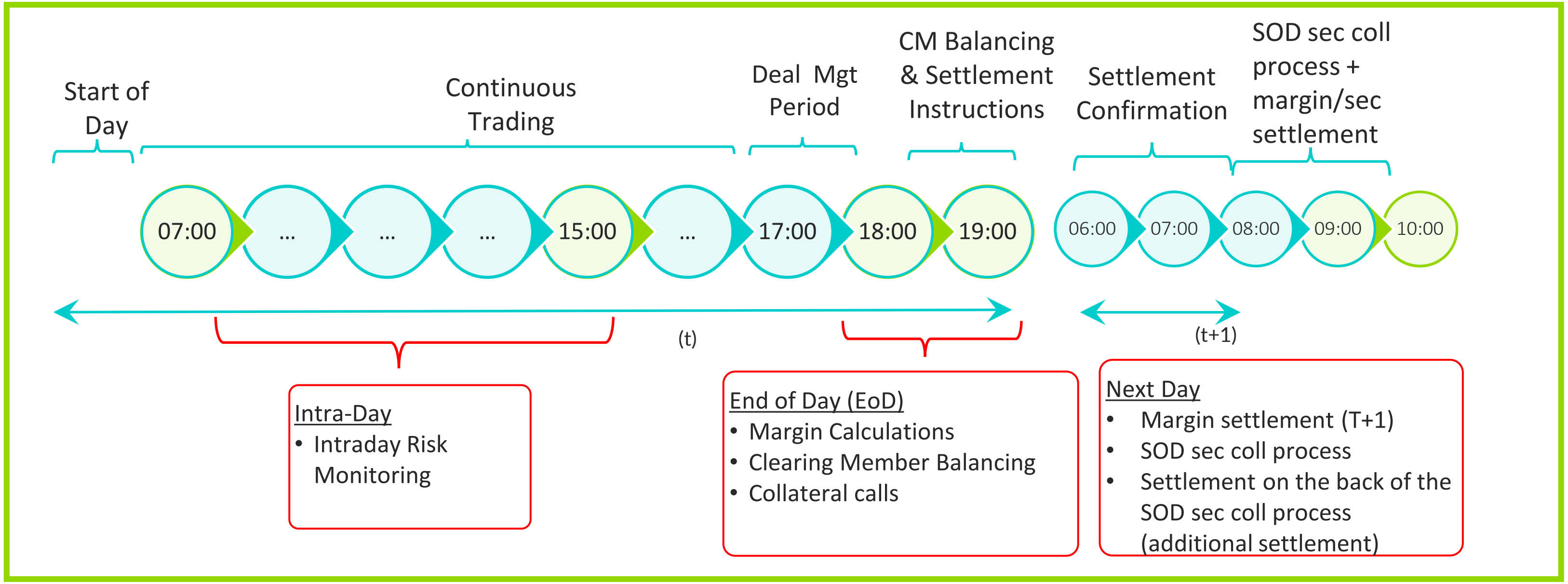
Bonds CCP | CCP daily risk management processes

Two core risk management processes are conducted daily by the CCP

1. **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).
2. **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 (based on IMC policy).



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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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- CCP rules, policies and procedures