

ASX

CHES Replacement

Business Design Working Group –
T+1 for CHES Replacement

2 May 2024

ASX acknowledges the
Traditional Owners of
Country throughout Australia.
We pay our respects to
Elders past and present.

ARTWORK BY: Lee Anne Hall, My Country My People



Housekeeping

Troubleshooting

- > Please mute yourself when not speaking
- > Please use the 'raise hand' feature on MS Teams if you would like to ask a question
- > Please introduce yourself when talking for the benefit of all members
- > Meeting is being recorded for the purposes of capturing decision and actions
- > Dial in details (audio only):
 - +61 2 7208 4607
 - Phone Conference ID: 985 182 00#
- > Presentation materials were distributed before the meeting and will be published on the website

Important Information

Competition Law Reminder

- Workshop members are reminded to have regard to their obligations under competition law. In particular, please note that the Competition and Consumer Act prohibits a corporation from engaging with one or more persons in a concerted practice that has the purpose, effect or likely effect of substantially lessening competition.

Agenda

01 – Agenda and Objectives

02 – Trade Acceptance and Clearing

03 – Settlement

04 – Corporate Actions

05 – Lifecycle and Operating Hours

06 – Next Steps



01 – Detailed Agenda & Objectives

01 – Introduction

Detailed workshop agenda

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

Topic	Duration
Introduction <ul style="list-style-type: none">• Workshop objectives and outputs• Canada Case Study• ASX Settlement Cycle	20 mins
Trade Acceptance and Clearing <ul style="list-style-type: none">• Trading• Netting• Cash market margining	40 mins
Settlement: <ul style="list-style-type: none">• Pre-settlement (Priming and Matching)• Batch settlement• Post settlement (Fails / Client Allocations)	40 mins
Break	15 mins
Other Considerations: <ul style="list-style-type: none">• Securities lending• Exchange Traded Funds• Exchange Traded Options• Corporate Actions	40 mins
Lifecycle and Operating Hours & Next Steps	25 mins
Total workshop duration	3 hours

01 – T + 1 BDWG

How did we get here?

01 – Introduction

02 – Clearing

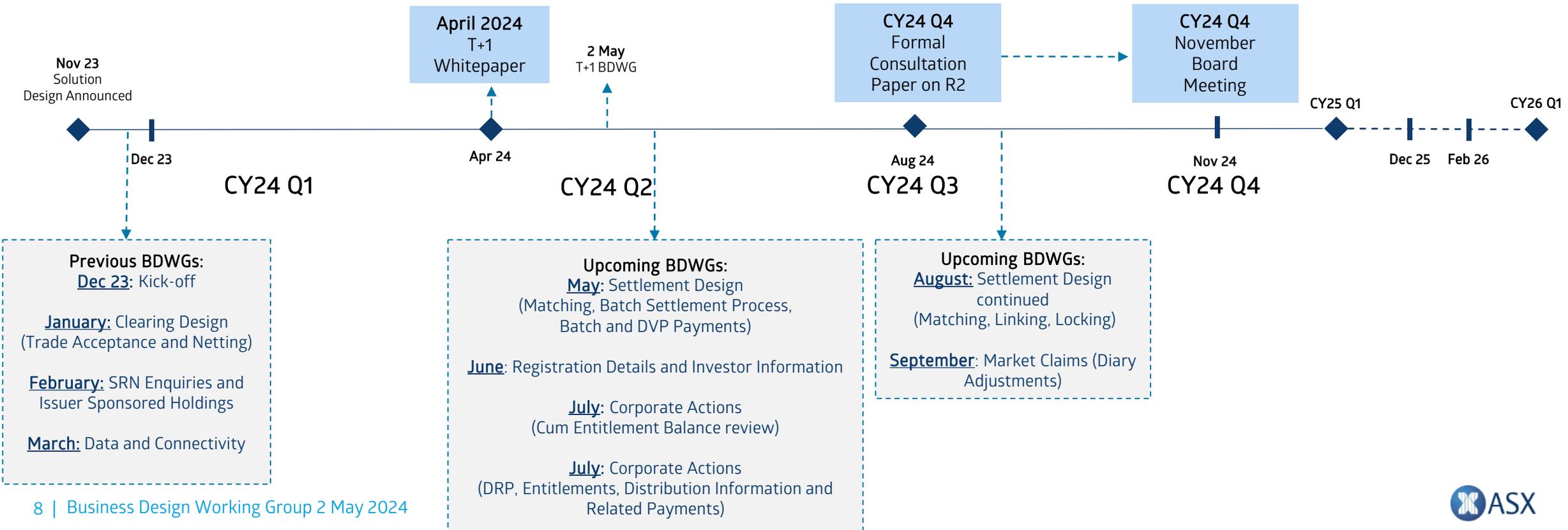
03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

- CHES Replacement scoping started in early/mid-2023 and didn't consider the possibility of T+1.
- The T+1 Working Group started in Dec 2023 to help analyse and inform a decision on the move to T+1, targeted in Nov 2024.
- To ensure alignment on broad industry expectations in CHES Replacement, design considerations specifically relating to T+1 should be considered for all previous and upcoming BDWG topics.



01 – T+1 Whitepaper

Overview

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

- In December 2023, the ASX Business Committee convened a T+1 Working Group – charged with considering the case for and against shortening the settlement cycle in the Australian cash equities market
 - Membership on the T+1 Working Group is published [here](#)
- A [Whitepaper](#) was published on 23 April 2024 for the purpose of soliciting the views of a broad range of stakeholders
- The focus of the Whitepaper is on strategic considerations which should be taken into account in forming a view on whether shortening the settlement cycle promotes the interests of the Australian market as a whole
 - eliciting feedback to inform cost, risk, benefit
 - specific to the Australian market – focused on how we differ and align with other global markets
- The Whitepaper does not:
 - attempt to document the 'how', 'when' or a 'business case' for T+1
 - consider T+0 or atomic settlement – fundamentally different proposition to T+1
- Section 3.1 of the Whitepaper includes a non-exhaustive list of working assumptions to be discussed and validated.

01 – T+1 Whitepaper

Important information

01 – Introduction

02 – Clearing

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06 – Next Steps

- Please note that **no decision** has been made regarding a move to T+1.
- The T+1 Working Group and Whitepaper are a separate engagement forum and are focused on the strategic decisions around whether the Australian market should consider moving to T+1.
- This session is to understand from a practical perspective what would be required to implement it, if that were to be the case.

01 – Workshop objectives

Key Objectives and outputs

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

The ASX Whitepaper will cover the transition to T+1 at the industry level; the scope of this workshop is limited to C&S and industry readiness for a **potential** T+1 settlement cycle.

Objectives

- **Collect advice** and expertise to understand what technical and operational changes would be required to enable T+1 settlement in the clearing & settlement system
- **Help inform inclusions for scope** with regard to T+1 design considerations in Consultation Paper Release 2 to be issued in August 2024.
- **Identify industry needs** that would be required to support T+1 settlement

Outcomes

- **Identify potential scope** and change in relation to T+1 that can be used in the planning of CHES Replacement
- **Inform future working groups** in relation to the scope of CHES Replacement
- **Inform future industry planning** on the practical impacts, primarily in relation to C&S, if T+1 were to be desired by the market.

The outcomes of a BDWG are not a commitment to scope and do not represent the final design of the system. The outcomes of the BDWGs will be used as input in assessing industry requirements and are subject to further consultation, legal and regulatory assessments.

01 – Case Study:

Canadian Depository for Securities (CDS)
Migration to T+1

01 – Case Study: CDS Migration to T+1

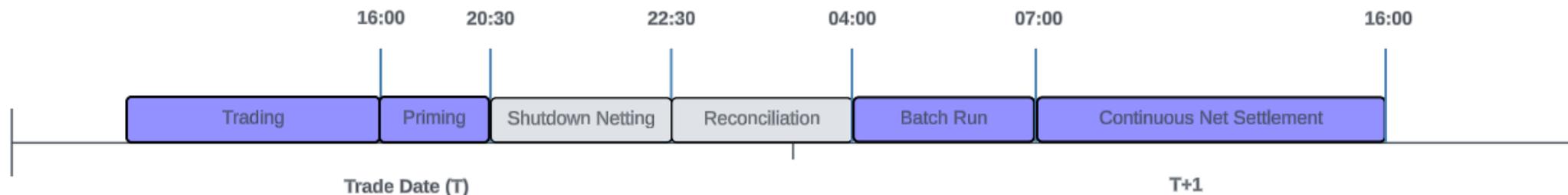
The journey to T+1

Key differences between CDS and ASX:

- Trade Registration is performed as part of an EOD batch;
- CSD model – i.e. omnibus depository rather than a name on register system.
- Batch settlement starts at 4am, followed by continuous net settlement model allowing for settlement to be performed from 7am through to 4pm.
- Cash is held in the system to facilitate continuous net settlement with final transfers made at the central bank at 4pm.
- FOP-only transactions are allowed from 4pm-7pm.

Primary changes made to facilitate T+1:

- Trade Registration is moved to hourly batches
- Continuous net settlement means sensitivity to timing of batch is not as strong.
- Initial priming occurs on T from 4pm-7pm.
- Batch Settlement starts at 4am and runs continuously through to 4pm in the evening, allowing for settlements to occur as stock becomes available for settlement.
- Enhanced reporting and exception management was implemented.



01 - ASX Settlement Lifecycle

Current state - T + 2

01 - Introduction

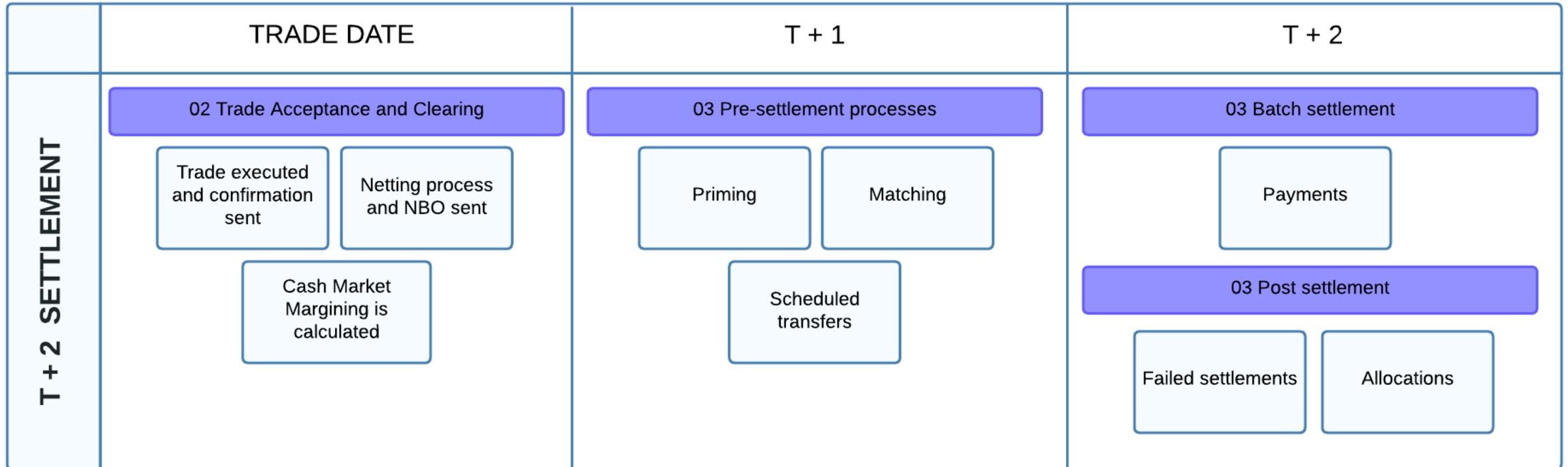
02 - Clearing

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02 – Trade Acceptance & Clearing

- Trade Acceptance
- Netting
- Cash market margining

02 – Trade Acceptance

Considerations for T+1

01 – Introduction

02 – Clearing

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Current trade acceptance approach (T+2)

- Trades can be accepted on a standard T+2 basis, a T+1 basis or for longer settlement periods (e.g. deferred settlement securities)
- T+1 trades are supported for:
 - Special Markets
 - ETO exercises
 - "As at" / late trades
- Trades can be cancelled by the AMO on T only.
- The assumption is that the T+1 settlement regime will apply to all market trades and associated client contracts executed in the Australian cash market.

Considerations for trade acceptance in a T+1 environment:

- Trades currently settling on a T+1 basis would need to be reconsidered assuming there is no case for same day (T+0) settlement:
 - Timings of ETO exercises may need to be revisited.
 - Special markets would no longer apply.
- The assumption is that there will be a reduction of the Corporate Action ex-period to 1 business day.
- Deferred settlement periods will depend on any revisions to Corporate Action timetables and may be shortened by 1 business day.



Are there any other considerations in relation to trade acceptance?

02 – Clearing - Netting

Considerations for T+1

Current Netting Approach (T+2)

- Eligible T+2 trades are netted in the evening on T.
- T+1 trades (ETO exercises/"as at" trades, special markets) and trades ineligible for netting are not netted and settled gross.
- Eligible deferred settlement trades are netted in the evening 2 business days before settlement.
- Netting is currently performed in a one-off batch process.
- As discussed in the clearing design session this is planned to move to a continuous netting model in CHES R.

Considerations for Netting in a T+1 environment:

- All netting would need to be finalised by a cutoff time the day prior to settlement (typically on T) and net settlement obligations notified to brokers once finalised.
- Trade acceptance processes and timings may need to be adjusted so that all trades can be included in the net (e.g. ETO exercises).
- Continuous netting would enable intra-day communication of net positions (if required).



What additional notifications do you require in relation to reporting of net positions due to T+1?

02 – Clearing - Cash market margining

Considerations for T+1

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

Current Cash Market Margining (T+2):

- ASX Clear calculates cash market margin for each clearing participant at the end of each business day.
- A margin settlement advice is disseminated via CHESSE the next morning at 6:00am.
- Payments are due by 10:30am via Austraclear
- Withdrawals are released after CHESSE batch settlement is completed (normally ~12:20pm).

Considerations for Cash Market Margining in a T+1 environment:

- Under current end of day margin arrangements, the timing of the margining process will need to be considered as well as same day settlement of margin calls.
- ASX may need to move to an intra-day margining model to enable T+1.



What changes are required in relation to Cash Market Margining to support T+1?

03 – Settlement

Pre-settlement – Priming

Pre-settlement – Matching

Batch settlement

Post settlement

03 – Pre-settlement - Priming

Considerations for T+1

Current Priming Considerations (T+2):

- Participants prepare for settlement by:
 - Moving stock to the accumulation entrepot on T+1 and then scheduling the transfer into the settlement entrepot on T+2, or
 - Scheduling the transfer directly into the settlement entrepot for T+2.
- Priming processes in CHESS varies between participants, with the vast majority currently split between T+1 and T+2.
- The 107 message (used to schedule transfers into the settlement entrepot) includes the trust amount to be transferred into the Participant's trust account for client stock delivered in settlement.



What additional functionality is needed to enhance priming in a T+1 environment?

Considerations for Priming in a T+1 environment:

- Additional system availability may be required for Participants to perform stock movements/schedule transfers.
- Faster and more efficient SRN enquiries, conversions and transfers from the Issuer sponsored sub-register would be required to minimise the risk of failed settlement.
- Participants may no longer require moving stock to the accumulation account as part of priming (other than Issuer sponsored transfers or other exceptions).
- New processes could be introduced, or existing processes could change to make priming for T+1 settlement more efficient
- TCS BaNCS supports:
 - The ability to request demand transfers to be affected on a future date (e.g. scheduled on T for processing immediately on T+1)
 - Reserving securities for a scheduled transfer from any delivering account (HIN).

03 – Pre-settlement - Matching

Considerations for T+1

Current Matching Considerations (T+2):

- Participants will match bilateral transactions that support market trades during T+1 and through to T+2.
- Current matching processes mean that there are often operational issues that can arise, requiring intervention. This means time is required to intervene and resolve.
- For example:
 - Awaiting instruction from the counterparty
 - Instruction not matching due to differing economics



What additional functionality is needed to facilitate matching in a T+1 environment?

Considerations for Matching in a T+1 environment:

- Faster matching of bi-laterals may be required to enable T+1, for example:
 - Common matching identifier
 - Integration into upstream systems
 - Client-side identifiers
 - Enhanced matching criteria
- Pre-matching would need to be completed for the majority of trades on T to minimise fails.
- Additional time may be required to allow transactions to be matched (e.g. throughout the night).

Note: This topic will be discussed in detail at the Settlement BDWG scheduled for the end of May.

03 – Batch Settlement

Considerations for T+1

Current Batch Settlement Process (T+2):

- Batch Settlement Cut-off is at 11:30am and CHESSE queues any transactions received after this time until batch is completed.
- Typically, batch completes in around 45 minutes and reopens around 12:15pm.
- Any transactions not settled in the batch are rescheduled to the following business day.

Considerations for Settlement in a T+1 environment:

- Taking into consideration pre-settlement processes, it is assumed that the current batch settlement cut-off time would need to move to later in the day.
- It may be beneficial to consider allowing for settlements to continue after batch has completed.
- A review of RITS cut off times for payments may be required if batch settlement is moved to a later time.
- Payment providers may need to consider changes to payment services for non-batch DVP transactions.



Would the market benefit from multiple settlement runs during the day? How would this affect your processes?

03 – Batch settlement completion time

1 Jan 2022 to 29 February 2024

01 – Introduction

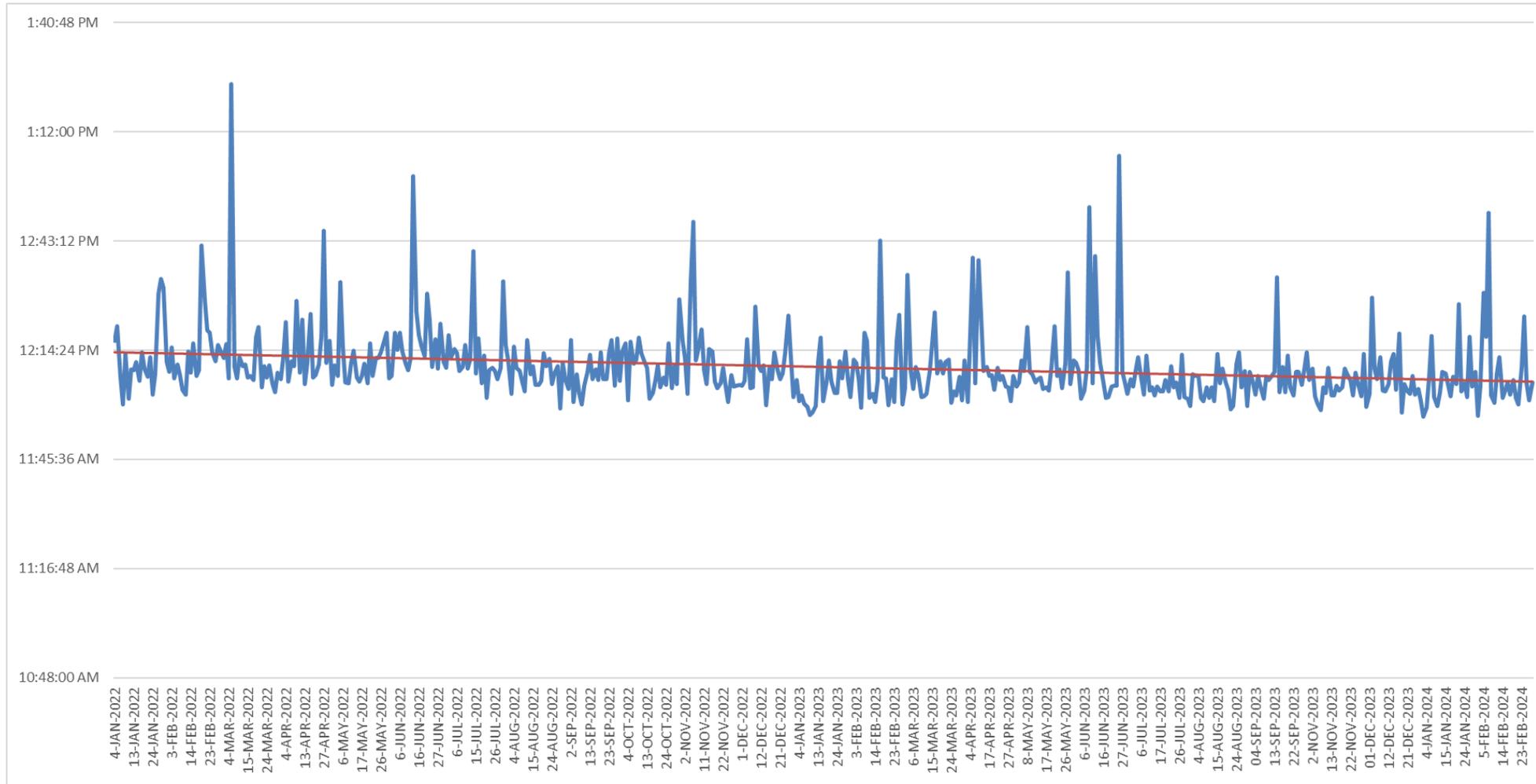
02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps



Over the last 2 years, the average settlement completion time for batch is 40 minutes.

03 – Post settlement – Client Allocations

Allocations and Failed Settlements

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

Current Post Settlement Process (T+2):

- Following completion of batch settlement, brokers will allocate stock to client accounts via demand transfers, and funds are transferred as appropriate.
- In the case of failed trades, these are rescheduled for settlement the following day and incur a fail fee.
- Close out notifications that apply to failed settlements are:
 - CHES notification sent on T+4
 - Shortfall to be covered by T+5
 - Referral to compliance occurs on T+8

Considerations for Settlement in a T+1 environment:

- Assuming that the current batch settlement cut-off time moved to later in the day, participants may need to consider changes required for post allocation processes and how these can be supported.
- Fails may increase as a result of the compressed time period and it may be necessary to review and better understand what type of transactions are failing settlement.
- Re-assessment of manual processes relating to SRN transfers, offshore clients with late allocations or large clients placing orders without pre-allocations of trades.



What post batch processes are completed in your organisation and how long do they take on average?



04 – Other considerations

Securities lending

Exchange traded funds

Exchange traded options

Corporate actions

04 – Securities Lending

Considerations for T+1

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

Current securities lending process (T+2):

- Securities lending market is characterised by a decentralised network of bilateral relationships.
- Typical process:
 - Owner of securities (often a large fund manager) will lend securities to a borrower in return for a fee.
 - The borrower may then sell these securities in the market (e.g. for a short sell)
 - The term of the loan is usually "open"
 - Securities must be returned to the lender on demand (i.e. when the loan is "recalled")
- Securities could be recalled when a lender executes a trade to sell those securities. The borrower would have sufficient time to purchase/borrow securities (if necessary) and return securities for the lender to meet their obligation.

Considerations for Securities Lending in a T+1 environment:

- Participants may require additional system availability (e.g. at the end of day, overnight, or at the start of day) to perform stock movements/schedule transfers & allow for matching of transfers relating to securities lending.
- Participants may require a later settlement cutoff or alternative settlement process (e.g. real-time settlement) for securities lending processes.
- The securities lending market may benefit from the introduction of centralised market infrastructure to facilitate securities lending processes and connectivity and integration with global lending platforms.



What additional enhancements would we need to consider for CHES to facilitate securities lending processes under a T+1 regime?

04 – Exchange Traded Funds

Considerations for T+1

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

Current ETF process (T+2):

- ETFs bought or sold by investors on market can require the creation and redemption of ETF units where securities in the basket are acquired or disposed.
- ETF unit creation/redemption is settled DvP in batch settlement on T+2 between Authorised Participants and Fund Custodians.
- DvP is based on the Net Asset Value (NAV) of the basket of underlying securities.
- Index composition files (reflecting securities acquired or disposed) are used to determine NAV and available on T+1 between 11am-1pm.
- A 2-day settlement period allows sufficient time to overcome geographical time zone differences



Are there other changes that should be considered in relation to ETF unit creation and redemption?

Considerations for ETF's in a T+1 environment:

- ETF Issuers would need sufficient time to value, calculate the settlement amounts and settle ETF units on T+1.
- Misalignment in global market settlement periods:
 - When the US moves to T+1 in May, there is a misalignment between the inflow of ETF unit subscription proceeds (T+2) and the settlement period for the acquired securities in the basket (US T+1). This may require accelerating the unit creation process to T+1.
- To facilitate ETF creation and redemption flows, the industry may require changes to batch settlement such as:
 - Moving batch to a later time.
 - Separate settlement batches for ETFs and other transactions.
 - DVP and Cash settlement outside of batch (i.e. non-batch DVP/real-time settlement).

Current ETO Process (T+2):

- When an ETO is exercised, we notify participants of the trade on T+1.
- Securities may be reserved in CHESSESS as collateral cover for ETO positions.
- Participants must request the withdrawal of eligible collateral to facilitate settlement.

Considerations for ETO's in a T+1 environment:

- A move to T+1 would have flow-on effects particularly around the exercise of a call option and the release of collateral where relevant.
- The frequency of fails under these circumstances may be impacted by a change to T+1.



What changes should be considered in relation to ETO exercise, assignment and collateral requirements?

04 – Corporate Actions – Ex Transaction Processing

Considerations for T+1

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

Current Ex/Record Date Processing (T+2):

- Currently the T+2 settlement cycle is accompanied by a two day "ex period".
- Cum balances are created on the morning of Ex Date and finalised at EOD on Record Date
- CHES allows changes to cum balances during the two-day ex period, this is understood to be used to support:
 - Priming
 - Securities Lending Transactions

Considerations for Ex Periods in a T+1 environment:

- It is assumed that the two-day ex period will be reduced to a single day with ex-date and record date on the same day.
- Given a single day ex period, we may need to support priming on T for settlement on T+1 whilst ensuring the entitlement stays with the seller.



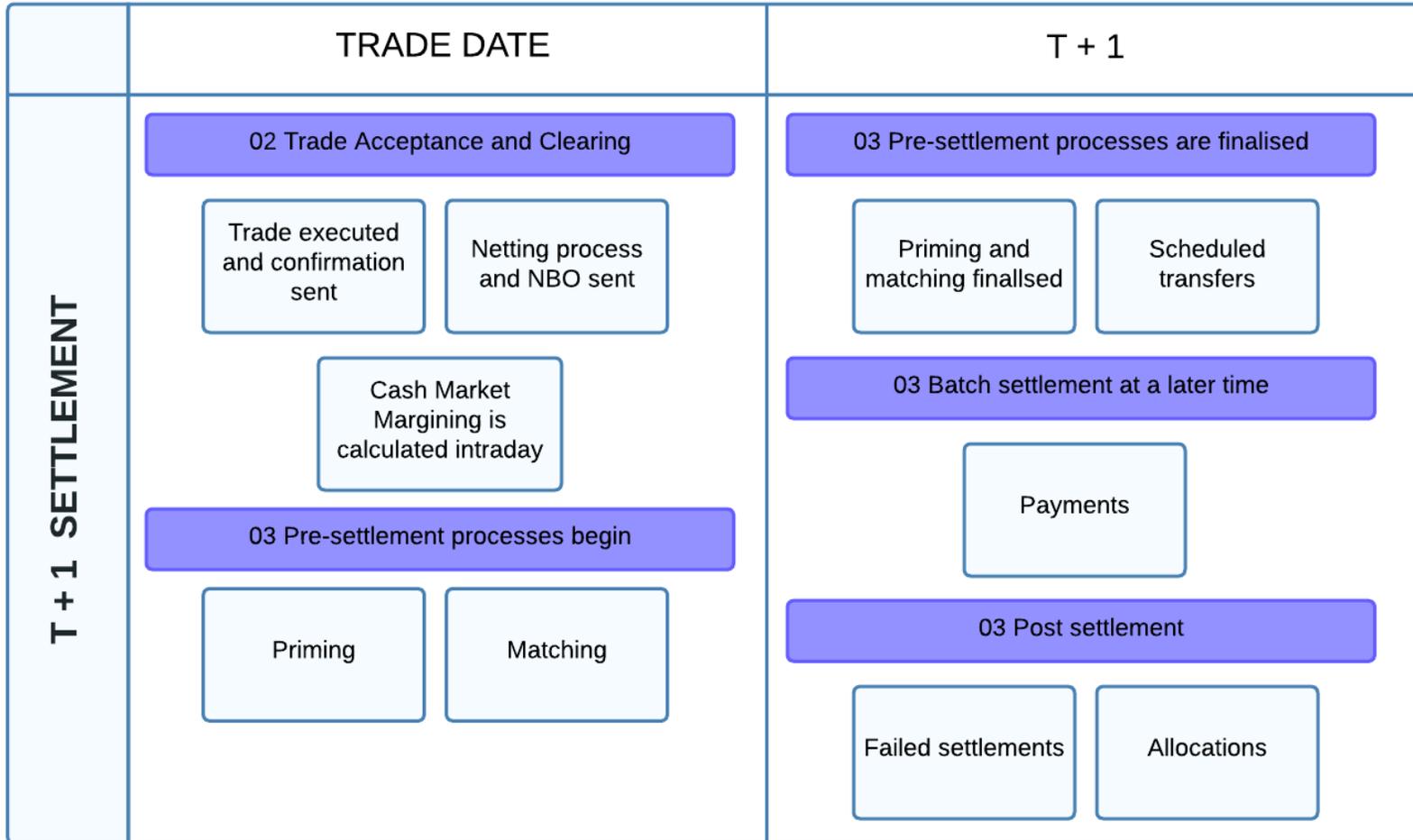
Would settlement of transactions on an ex-basis, prior to record date be required in any other scenarios?



05 – Lifecycle & Operating Hours

05 – ASX Settlement Lifecycle Comparison

What changes are to be considered in a T+1 environment?



Would priming and matching processes need to start in the evening of T, following market close?



Would batch settlement need to be moved to late in the day to allow for the completion of priming and matching?



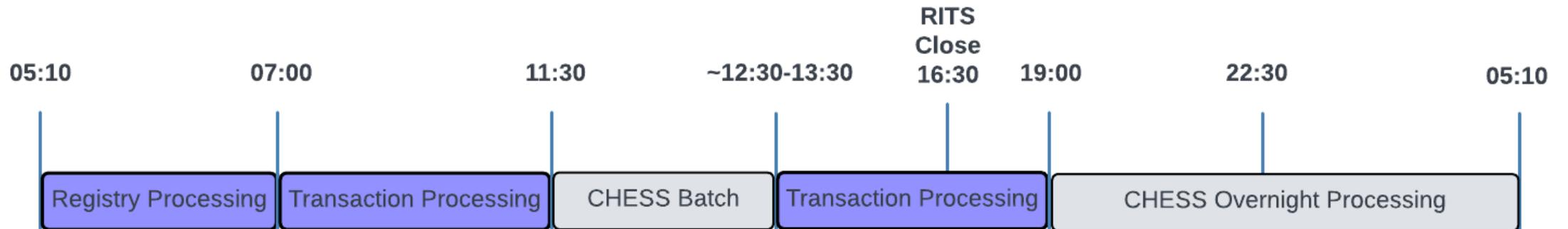
How long is needed for post-settlement processes after the completion of batch settlement?

05 – Operating Hours

What changes are required?

- 01 – Introduction
- 02 – Clearing
- 03 – Settlement
- 04 – Other Considerations
- 05 – Operating Hours
- 06 – Next Steps

Current CHES Operating Hours:



Would there be a need to open earlier, or close later to facilitate transaction processing in a T+1 cycle?

06 – Next Steps

06 – Next Steps

01 – Introduction

02 – Clearing

03 – Settlement

04 – Other Considerations

05 – Operating Hours

06 – Next Steps

- > Organisations must ensure that any feedback in relation to T+1 is included in the response to the T+1 Whitepaper.
- > A business design document will not be created as part of this BDWG, any potential scope identified will be used to inform future working groups and the Consultation Paper on Release 2.
- > Please inform ASX of any changes to your nominated BDWG representatives to CHESSReplacement@asx.com.au



QUESTIONS?



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THANK YOU.

