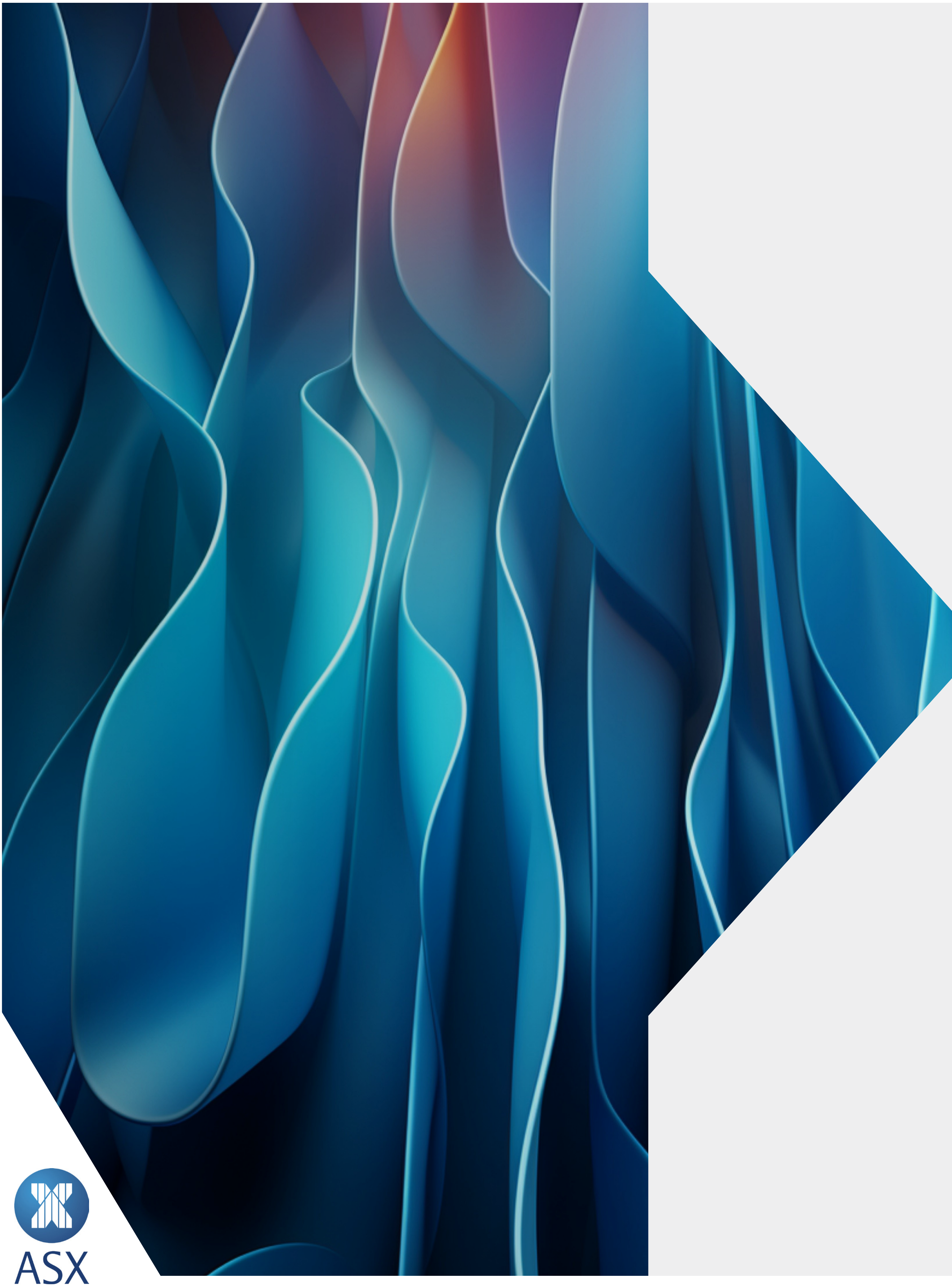
Considerations for accelerating cash equities settlement in Australia to T+1

Whitepaper

23 April 2024

ASX



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Invitation to comment

ASX invites responses to this Whitepaper by 18 June 2024.

ASX prefers to receive responses using the electronic form available here.

If you would like your submission, or any part of it (including your identity), to be treated as confidential, please indicate this clearly in your submission. ASX may publish the non-confidential submissions (including your identity) in whole or on a summary basis. Where a submission, or any part of it, is marked confidential ASX may publish the content on a summary and anonymous basis only. Where ASX is requested by a regulator or otherwise required by law to produce a confidential submission it has received, ASX will use its best endeavours to advise the submitter ahead of the production of the submission.

ASX is available to meet with interested parties for bilateral discussions on the Whitepaper.

Contacts

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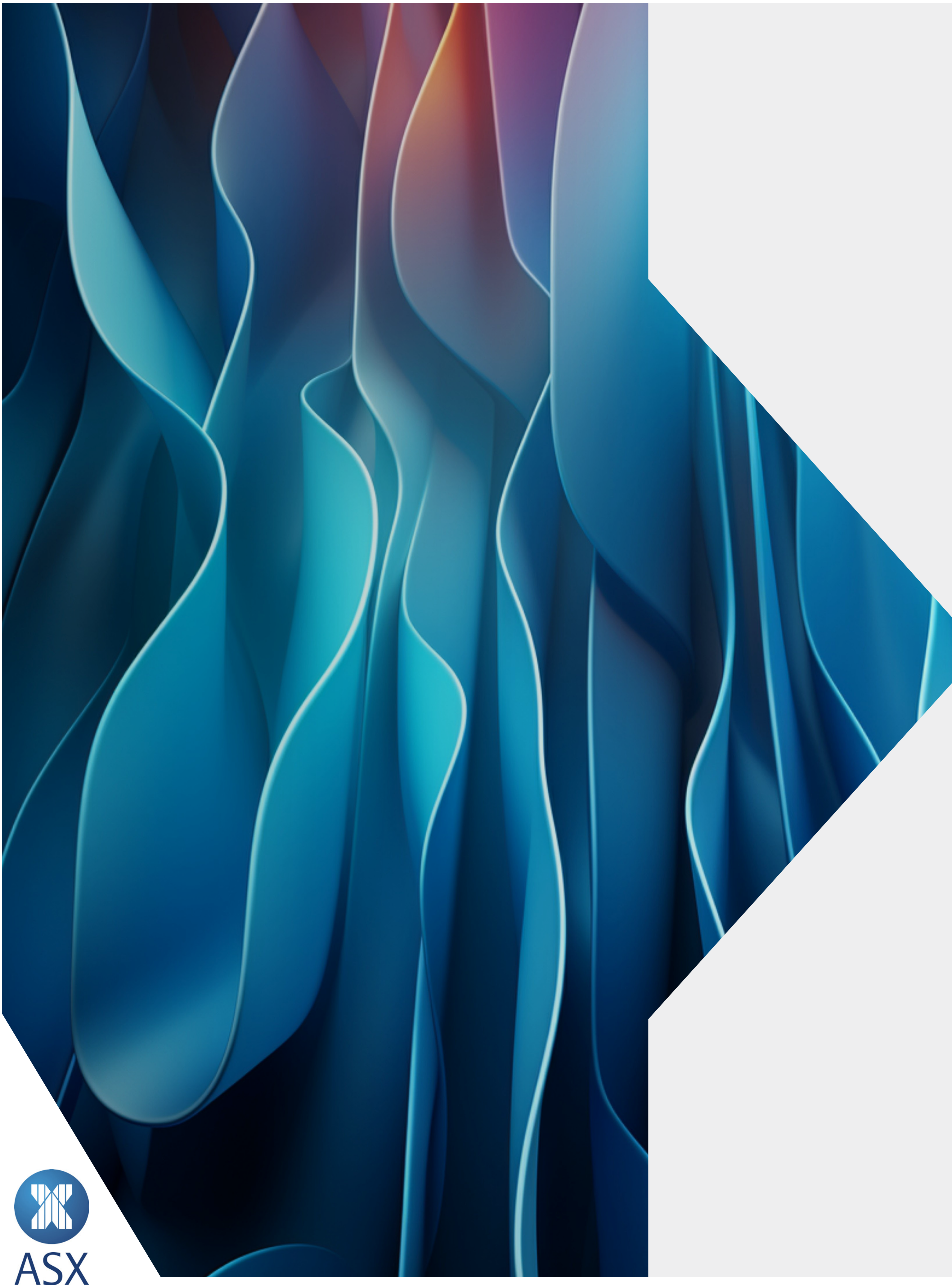
ASX thanks the following organisations for contributions to this Whitepaper via the ASX Business Committee's T+1 Working Group:

- ASX Limited (Markets)
- Australasian Investor Relations Association (AIRA)
- Australian Custodial Services Association (ACSA)
- Australian Financial Markets Association (AFMA)
- BNP Paribas
- BoardRoom
- Cboe Australia Pty Ltd
- Citi
- Commonwealth Securities Limited
- Computershare
- FinClear Services Pty Ltd
- Goldman Sachs Australia Pty Ltd
- Morgans Financial Limited
- Stockbrokers and Investment Advisers Association (SIAA)
- UBS Securities Australia Ltd
- WealthHub Securities Limited

ASX also acknowledges the contribution of:

- the ValueExchange



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Contents

Executive Summary

In Australia since 2016, the settlement of cash equities trades occurs on a trade date plus two business days (T+2) basis in CHESS (Clearing House Electronic Subregister System).

Globally, continuous pursuit of risk reduction and efficiency gains has resulted in many major markets examining the case for shorter settlement cycles. In this context, consideration is being given to shortening the settlement cycle in Australia to trade date plus one business day (T+1). Notably, the USA, Canada and Mexico will transition to T+1 in late May 2024 and India has been operating on T+1 since 2023. Concurrently, other significant markets including the United Kingdom and those under European Securities and Markets Authority (ESMA) supervision are actively exploring and seeking insights on the feasibility and implications of shortening their settlement cycles.

Despite similarities with other global financial market intermediaries and marketplaces, key differences require specific consideration of the risks, benefits, and costs of transitioning to T+1 in Australia. For example:

- Time-zone: ASX, based in Sydney, operates during hours that overlap with most major Asian exchanges. However, there is less overlap with North America and Europe. Time-zones have implications for intermediaries and investors, including foreign exchange and securities lending.
- Size: despite being a top 20 global market[1], ASX is relatively small compared to most North American, some European, and large Asian markets. Market size relative to the cost of industry transition is an important factor in assessing the economic benefit of shorter settlement cycles.
- Dematerialised and highly efficient central securities depository (CSD): ASX Settlement operates a dematerialised CSD. It pioneered 'name on register' digital holdings in the 1990s with the launch of CHESS, which has one of the lowest settlement failure rates globally.
- Investment flows: approximately 29% of funds invested in Australian cash equities come from overseas[2]. The majority of foreign investment originates from North America, Europe and the United Kingdom.
- Retail vs institutional trading activity: ASX estimates that retail investors make up around 13% of total trading activity, institutional investors around 83%, and proprietary traders/ market makers around 4%, based on traded values[3]. Given that retail trading activity tends to be pre-funded, markets with a high proportion of retail trading activity may face fewer impacts in shortening settlement cycles.
- Current settlement timetable: the daily CHESS batch settlement cycle cut-off is 11:30am, effectively meaning that Australia currently operates on a T+1.5 settlement cycle. For North American investors, this is effectively T+1 already.

T+1 Working Group

The ASX Business Committee (Business Committee) formed the T+1 Working Group in December 2023 to provide analysis and insights to the Business Committee on settlement cycle compression. The T+1 Working Group is not a decision-making forum and reports to the Business Committee on its deliberations. A list of members of the T+1 Working Group is contained in **Appendix A**.

1. As measured by market capitalisation as at November 2023, using monthly data published by World Federation of Exchanges, available at: https://focus.world-exchanges.org/issue/january-2024/market-statistics
2. Orient Capital Shareholder Data Insights, Average S&P/ASX 200 register including Australian Retail, as at January 2024.
3. Estimated data compiled and analysed by ASX, as of December 2023.

Working group members have provided input into this paper. As at the date of this Whitepaper, the group has met 4 times and has also held several information sessions with industry experts.

ASX, in consultation with the ASX Business Committee and the T+1 Working Group, will use the responses to this Whitepaper to further develop the approach for the Australian market, inform a decision and the plan for further consultation.

Process for a decision on T+1

The work to consider a possible transition to T+1 in Australia will go through several phases.

- Identify considerations for T+1: This is primarily the focus of the Business Committee and T+1 Working Group. A survey conducted in mid-2023 revealed diverse opinions among Australian stakeholders. The aim of releasing this Whitepaper is to ensure that stakeholders are aware of the key issues.

- Observe: The USA, Canada and Mexico plan to transition to T+1 in May 2024. This change will immediately impact many Australian stakeholders, especially those with global operations. They will need to adapt to a shorter settlement cycle alongside their North American counterparts. Observing the benefits and challenges of this transition, along with the necessary operational changes to efficiently implement T+1 (both overseas and for impacted Australian stakeholders), will be extremely beneficial, both in the short term and medium term.

- Consensus: With the consideration of the responses to the Whitepaper and the observations from North America, ASX will re-engage with Australian stakeholders to determine whether there is a clear consensus on a move to T+1 in Australia.

- Strategic Issues: Industry consultation is likely to raise additional strategic considerations for a potential transition to T+1. Strategic considerations may include the sequencing of T+1 in light of other major projects such as CHESS replacement, whether other settlement timeframes, such as T+0, should be evaluated, or whether remaining on T+2 would continue to serve the interests of the market.

- Decision: The decision whether to move to a shorter settlement cycle will sit within a decision framework that considers each of the phases referred to above. A decision will need to balance the consensus (or not) of the market, strategic issues, regulatory and Government policy considerations and the costs and benefits of change.

- Implementation (as appropriate): Including timetable, costs, and consultation.

Input from the ASX Business Committee and the ASX Cash Equities Clearing and Settlement Advisory Group (Advisory Group) will also be important for decision-making on a possible transition to T+1 in Australia. It is expected that the Business Committee will take a prominent role early in the consideration of a possible transition, concentrating on identifying issues and establishing market consensus. As the process progresses, the Advisory Group's role will become more prominent, focusing on the strategic priorities and the decision-making framework.

Milestones

ASX intends to work to the following key milestones in 2024 with industry and regulators on a possible transition to T+1:

- 23 April 2024: Whitepaper published
- 18 June 2024: eight week response period closes
- Mid June to late July: summary of feedback document provided to Business Committee and Advisory Group
- August: summary of feedback document released, including next steps
- November: targeting a decision on T+1 transition.

Decision

The decision to move (or not) to T+1 has several dimensions including the timing and nature of change and the interplay with the CHESS replacement project. A decision is unlikely to be a binary "yes/no" and may include the following:

Option 1 - Move to T+1 as soon as possible

- Pros: delivers benefits early, aligns with global shifts, potential long-term efficiency gains.
- Cons: significant disruption and cost, technological challenges.

Option 2 - Move to T+1 in the medium term, prioritise work to enable transition and phase-in T+1

- Pros: provides time for adjustment, mitigates disruption, allows for learning from early adopters.
- Cons: protracted transition which will divert resources and funds from other projects including CHESS replacement.

Option 3 - Delay T+1 adoption

- Pros: provides preparation time, chance to watch and learn, allows consideration of T+0. De-risks roll out of T+1 and CHESS replacement.
- Cons: out of step with global trend (possibly).

Additional options including (but not limited to)

Hybrid approach

A 'watch and learn' strategy, initially maintaining T+2 while observing global market adoptions, then moving to T+1 when industry processes and technology are aligned.

Regular market consultation

Seek ongoing industry input (e.g. annually) to determine readiness and create an optimal timetable.

Prioritised sequencing

Coordinate T+1 implementation with the timing of the CHESS replacement project in Australia. Focus on technology and process automation to enable a smoother transition.

ASX, in collaboration with the ASX Business Committee's T+1 Working Group, invites stakeholders to contribute their perspectives on the case for accelerating cash equities settlement in Australia to T+1.

We welcome responses using the electronic form available here by 18 June 2024.

1/ Australian settlement landscape

The move from T+3 to T+2 in 2016 (aligned with New Zealand and Australia's OTC debt market) was very successful and occurred with broad industry support. However, as the settlement cycle shortens further, operational and logistical considerations could materially increase. That is to say, a move from T+2 to T+1 is likely to be more significant and challenging than the move from T+3 to T+2. Although some global markets such as India have foreshadowed a move to T+0, feedback from Australian stakeholders is that a move for the Australian market from T+2 to T+0 or atomic settlement is not viable at this point in time.

The timing of any move to shorten settlement cycles will be important. In the face of continuing moves to T+1 across the world, the pressure on Australia could increase in order to avoid dislocation risks with other key economies. These pressures will need to be measured against the costs of transition faced by the Australian market and by impacted stakeholders. In this context, it should be noted that ASX has announced a replacement of the CHESS system technology[4], a large project which involves substantial resources from stakeholders across the Australian market.

1.1. What is T+1?

References to a potential move to T+1 settlement for the Australian cash equity market means settlement one business day after the trade date (T) (that is, T+1 is trade date plus one business day).

Refer to section 3.1 for a non-exhaustive list of working assumptions about how T+1 would be introduced for the purposes of this Whitepaper and eliciting responses.

1.2. Current settlement method in Australia

The Australian cash equity market uses the ASX's CHESS for the clearing and settlement of trades executed on ASX, Cboe Australia, National Stock Exchange of Australia (NSX) and the settlement of trades executed on Sydney Stock Exchange (SSX). CHESS accommodates approximately 2,200 listed companies and nearly 4 million investors. CHESS is an electronic system that records the ownership of securities, encompassing a wide range of instruments such as shares, warrants, listed trust units, exchange traded funds (ETFs), CHESS depositary interests (CDIs), unsecured notes, convertible notes, exchange-traded Australian Government Bonds (eAGBs), and various interest rate securities. Settlement in CHESS currently operates on a T+2 settlement cycle, meaning the completion of securities transactions occurs two business days after the trade date[5]. In this system, the seller (represented by a settlement participant) is required to deliver the sold securities, and the buyer (also represented by a settlement participant) must complete the payment for these securities, by the second business day following the transaction.

The settlement process is conducted using Delivery versus Payment (DvP) model 3[6]. A single daily batch of settlement obligations between payment providers is settled across their Exchange Settlement Accounts (ESAs) in the Reserve Bank Information and Transfer System (RITS).

4. Further information is available here: https://www.asx.com.au/markets/clearing-and-settlement-services/chess-replacement.
5. Exceptions to the T+2 settlement cycle include deferred settlement to support corporate actions, and failed settlements.
6. DvP model 3 refers to "systems that settle transfer instructions for both securities and funds on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle" (BIS, 1992, Delivery Versus Payment in Securities Settlement Systems, page 16, available at: https://www.bis.org/cpmi/publ/d06.pdf).

1.3. Transition from T+3 to T+2

The shift from T+3 to T+2 settlement in the Australian and New Zealand cash equities markets occurred in 2016, following an earlier transition from T+5 to T+3 in 1999. The move to T+2 had strong industry endorsement following broad market consultation in 2014, and ASX worked closely with the market to implement this change. Globally, many major markets transitioned to T+2 from 2014 to 2019.

A number of changes were implemented by ASX and market participants to facilitate the move to T+2 and to help maintain market efficiency (see Appendix B).

1.4. Highly efficient market in Australia on T+2

The Australian cash equities market is highly efficient. Based on historical analysis of settlement failure rates in our market, and comparison with selected offshore markets, Australia has very low fail rates, averaging around 0.3% (volume-based) and 0.1% (value-based) from 2019 to 2023.

Global data on settlement failure rates uses different methodologies across CSDs and exchanges (as well as noting a range of different incentive-related regimes) however in Europe, the Association for Financial Markets in Europe (AFME) cites an average settlement failure rate by volume of 5.8% for TARGET2-Securities (T2S) between January 2020 to June 2023[7], and ESMA data from April 2021 to April 2023 indicates settlement fails as a percentage of volume sit at around 4-5% for equities[8].

Evidence from India, coupled with a projected increase by around 2% in fail rates to around 4% in the USA and Canada after their move to T+1[9], suggests that settlement failure rates are very likely to increase temporarily following a T+1 transition. While all stakeholders would likely face increased settlement failure rates, it is likely that less automated or less well-resourced stakeholders' failure rates could be further impacted under T+1. This is an important consideration when considering the benefits of a move to T+1.

1.5. T+2 in Australia is effectively T+1.5

Under the current T+2 settlement arrangements, batch settlement cut-off in Australia occurs on Settlement Date (T+2) at 11:30am. All preparations by market participants need to occur by mid-morning on T+2. On average, batch settlement completes by 12:20pm on Settlement Date[10] – effectively meaning that settlement occurs on T+1.5.

1.6. Technical capacity for CHESS to support T+1

Notwithstanding changes that would be required by stakeholders to their own systems and processes, ASX's existing CHESS system possesses the technical infrastructure necessary to facilitate a transition to a T+1 settlement cycle. However, the realisation of the required technical adjustments to support T+1 within CHESS is contingent upon achieving a broad consensus within the industry regarding key strategic or implementation specific decisions that would underpin a shift to T+1.

ASX is currently developing a replacement for the CHESS system. The new CHESS system is based on an established product with demonstrated capability for flexibility in settlement cycles. By incorporating flexibility for shorter settlement periods into the design of the new system, ASX aims to provide a robust and adaptable infrastructure that can respond to future market demands and regulatory requirements.

In short, both existing CHESS and its replacement could support T+1, however the new system will provide more flexibility and capacity for change.

7. AFME 'Improving the Settlement Efficiency Landscape in Europe' October 2023, page 8, available at: https://www.afme.eu/Portals/0/DispatchFeaturedImages/AFME_SettlementEfficiency2023_07%20final.pdf
8. ESMA TRV Statistical Annex, Chart A.144 one-year moving average of share of failed settlement instructions in the EEA30, in % of number of instructions, page 31, available at: https://www.esma.europa.eu/sites/default/files/2023-08/ESMA50-1389274163-2682_TRV_2-23_Statistical_annex.pdf
9. Data sourced from the Value Exchange, available at: https://thevx.io/campaign/t1/
10. Daily average batch completion time by 12:20pm from 2019 to 2023

2/ Benefits and challenges of T+1 in a global settlement landscape

Markets around the world are consistently looking for ways to reduce risk and enhance efficiency. Reduction in settlement cycles has been proposed as one way to deliver these outcomes, providing significant funding and risk reduction benefits to stakeholders. On the other hand, the costs and risks associated with a transition to T+1 also need to be considered, so that the market can reach the right decision, at the right time, for the industry.

2.1. Benefits of T+1

The move to shorter settlement cycles across the globe has been driven by a variety of stakeholders, including financial market intermediaries, regulators, governments and impacted participants. Global literature cites potential benefits of settlement cycle compression which can be broadly grouped as risk reduction, enhanced operational efficiency, and advantages for stakeholders.

Risk reduction

- Mitigation of settlement risk: by expediting the settlement process, there is a notable decrease in the risk associated with the duration of settlements. The sooner the irrevocable settlement of transactions, the smaller the risk and uncertainty for both buyers and sellers.
- Reduction of systemic risk: shortened settlement cycles lower overall risk across the financial system (reduced quantity of unsettled obligations resulting in reduced market exposure in the event of a systemic shock that results in a default).
- Decrease in capital and margin: the reduced period of risk and uncertainty could lead to a reduction in required levels of capital and margin

Enhanced operational efficiency

- Shorter settlement cycles strengthen the case to embrace automation, straight through processing and digital transformation in trade-related processes.
- End investors gain from diminished operational risks throughout the entire trade cycle, enhancing overall investment security.

Advantages for stakeholders

- Expedited results for investors coupled with simplified market entry, fostering a more dynamic investment environment.
- Harmonisation of settlement and funding cycles with other leading global markets, which minimises the financial impact of market misalignments.
- Creation of avenues for the development of new business opportunities, offering a strategic edge in an evolving market landscape.

2.2. Challenges of T+1

Implementing and sustaining faster settlement cycles, such as T+1, entails various risks, costs and challenges, impacting stakeholders differently, compounded by challenges associated with global time-zones. These challenges include transition costs, capital expenditure, potential investor costs, and the emergence of new (and sometimes unintended) risks.

Transition costs

- Stakeholders must allocate resources for managing potential increased risks of settlement failures post-transition to T+1, affecting both market operations and client relationships.

Capital expenditure

- Shortening settlement cycles by one day necessitates substantial investment in technology, process improvement, workforce training and potential increases in workforce size. This involves automating manual tasks, streamlining time-intensive processes, and enhancing data processing speed throughout the settlement cycle; any of which could also impact operational risk for aging technology, tools, platforms and systems.

- The impact of these expenditures varies across the market. For example, while brokers and custodians might offset these costs against the future capital and funding advantages of T+1, fund managers and their clients (asset owners or wealth clients) may not see equivalent financial returns from their T+1 expenditure.
- Smaller stakeholders could be disproportionately affected by the costs related to system upgrades and automation (depending on arrangements with software vendors), potentially hindering their ability to meet evolving market demands.
- Brokers will have a reduced window to effect and return securities used for securities lending, both domestically and for international counterparts.

Investor costs

- Investors, depending on their location and investment strategy, might need to increase pre-funding levels in a T+1 environment, reduce securities lending activities, or incur higher treasury costs due to settlement mismatches across different investment markets. These changes could impact fund performance.

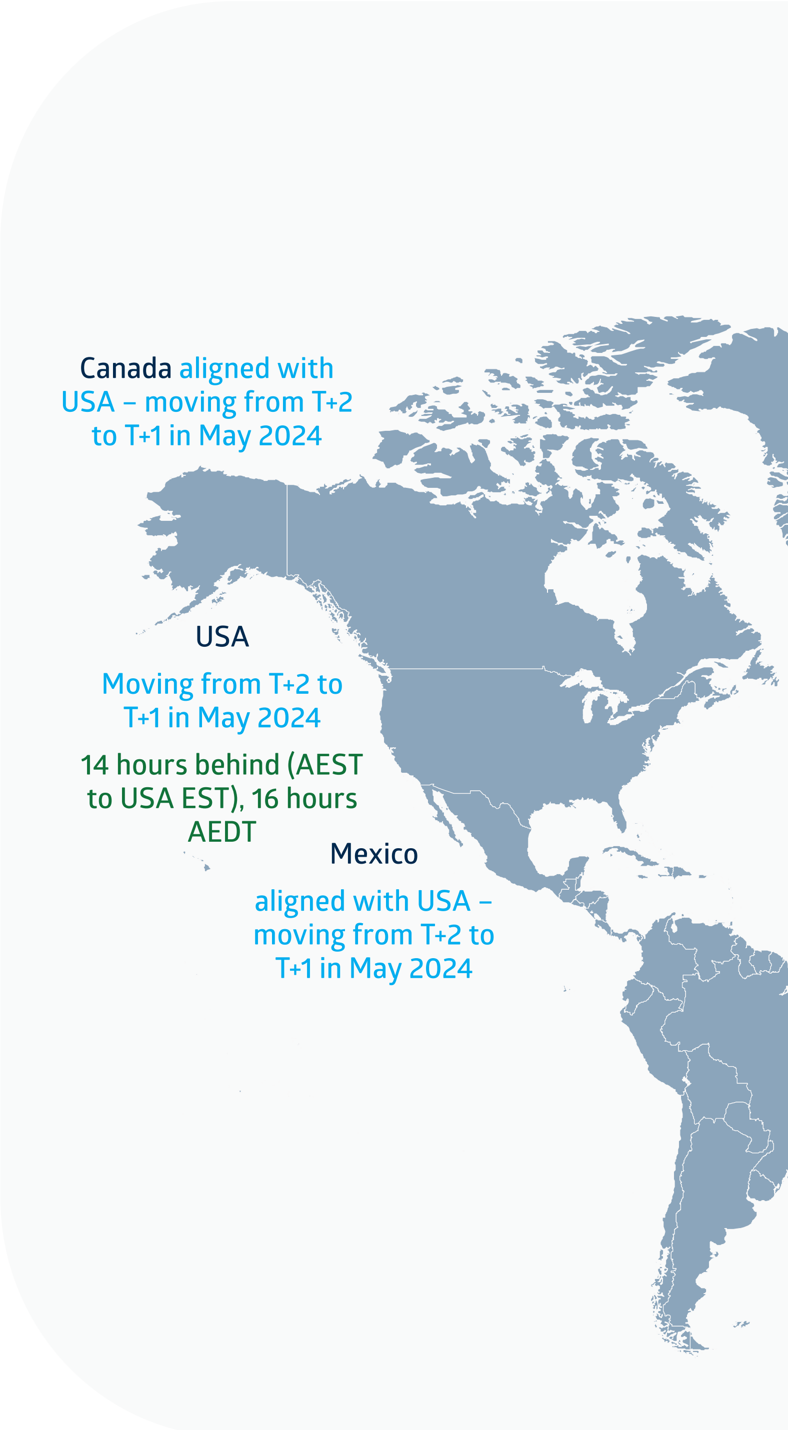
Emergence of new risks

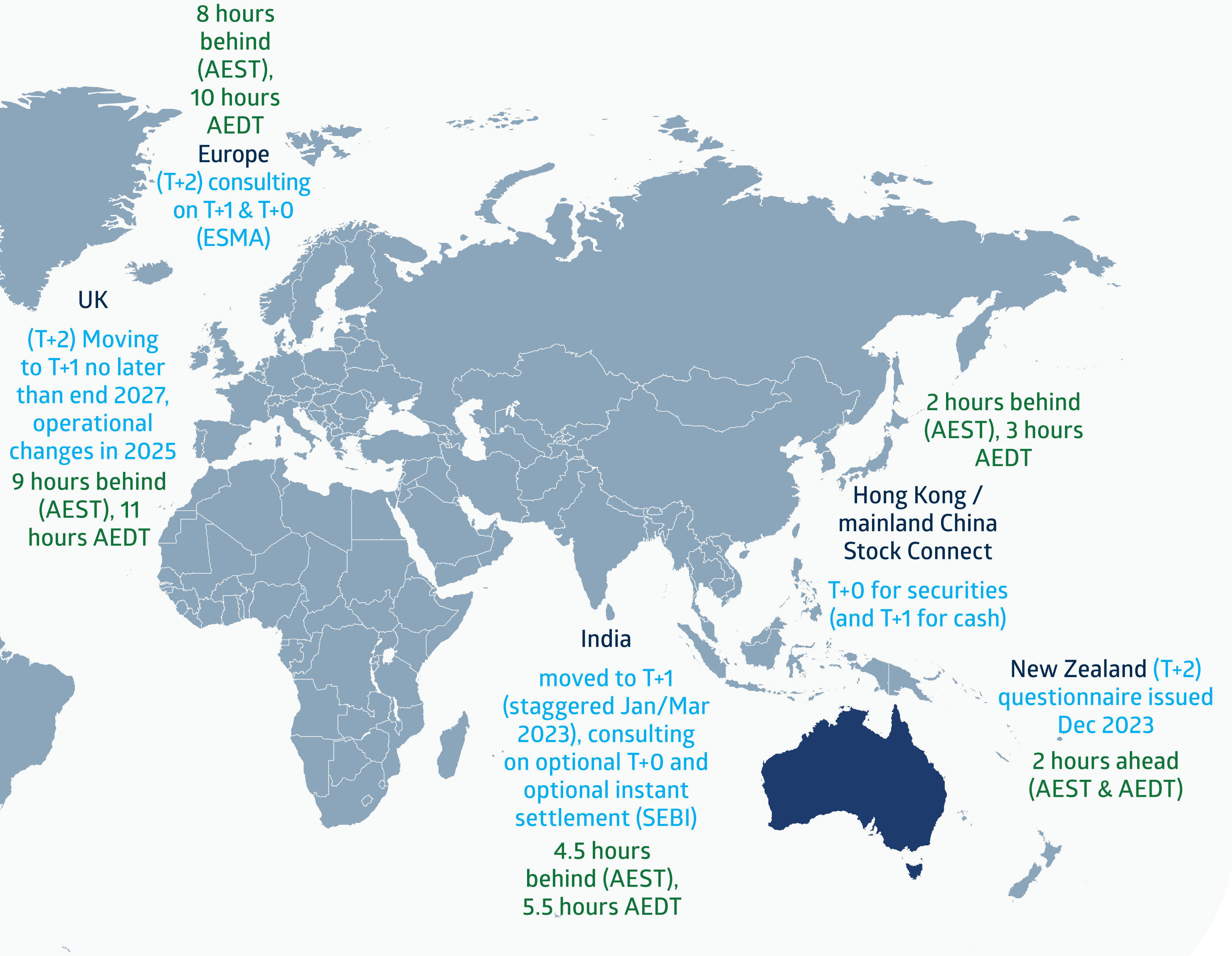
- Heightened time pressures may amplify risks, especially for smaller firms reluctant or unable to automate critical processes, potentially leading to contagion risks.
- Possible misalignments in market processes and infrastructures may introduce unforeseen risks.

2.3. Specific global considerations

Most major markets are either considering moving to T+1 or have decided to move. Diagram 1 summarises the status of major equity markets, with text in green indicating the time-zone differences across Australian Eastern Standard Time (AEST) and Australian Eastern Daylight Time (AEDT).

Diagram 1




8 hours behind (AEST), 10 hours AEDT
Europe
(T+2) consulting on T+1 & T+0 (ESMA)
UK
(T+2) Moving to T+1 no later than end 2027, operational changes in 2025
9 hours behind (AEST), 11 hours AEDT
2 hours behind (AEST), 3 hours AEDT
Hong Kong / mainland China Stock Connect
T+0 for securities (and T+1 for cash)
India
moved to T+1 (staggered Jan/Mar 2023), consulting on optional T+0 and optional instant settlement (SEBI)
4.5 hours behind (AEST), 5.5 hours AEDT
New Zealand (T+2) questionnaire issued Dec 2023
2 hours ahead (AEST & AEDT)

In addition to the above considerations, many markets have unique characteristics that have accelerated, or may accelerate, their move to T+1. Some of these include:

MARKET*	SPECIFIC MARKET DRIVER
USA	To avoid restrictions on trading activity being driven by post trade processes (trading in stocks such as GameStop causing extreme price fluctuations, impact on margin requirements for brokers such as Robinhood)
Canada and Mexico	To align with USA and avoid funding gaps driven by different cross-border settlement cycles
UK	Harmonisation with international markets, improving market resilience and reliability, reduction in risk and cost saving[11]
Europe	To deliver market (margin) efficiencies and to minimise potential mismatches with the US and other North American markets
India	Heavily domestic retail focused market (high levels of pre-funding) – promote growth in retail investing and desire for real-time movement of cash and securities
Hong Kong and mainland China – Stock Connect	To optimise market safety and minimise (end) investor risk by ensuring that securities trades are pre-funded, in advance of settling on T+0

*The importance of alignment between New Zealand and Australia is acknowledged.

2.4. Implications for Australia of global moves to T+1 and a growing pool of T+1 liquidity

The case for the Australian market needs to be assessed against the evolving global landscape. The outcomes of transitions to T+1 settlement for early adopters – such as settlement failure rates and stock loan availability – will be important, and it will take time to observe the longer-term impacts of transitions to T+1 in these markets. The extent to which there will be increasing migration globally to T+1 will likely reflect the experience of early-adopter markets such as the USA, Canada and Mexico. Detailed analysis of key features of the Australian cash equities market for comparison points to any emerging issues post go-live in the USA, Canada and Mexico will be a valuable learning exercise. More broadly, the outcomes of global consultations underway will also weigh into considerations for Australia.

- As global markets continue to accelerate settlement cycles (driven by a combination of their own domestic considerations and by the potential benefits of accelerated settlement), the cost-benefit evaluation for T+1 will evolve.
- In the short term, each global market that transitions to T+1 will increase the costs of funding dislocation with Australia – meaning that the costs of Australia remaining on T+2 will continue to grow (for any global investor moving funds into or out of Australian securities).
- At the same time, stakeholders will continue to improve their ability to manage large volumes of trade processing on a trade-date basis over time – meaning that the costs of a potential transition in Australia would reduce.
- These parallel trends combine to make the timing of any potential T+1 decision of significant importance. This underscores the importance of identifying the best possible timing of any move for the Australian market.

Specific to the Australian market, any move to T+1 (including the lead-time) needs to be considered against the backdrop of initiatives the Australian equities market and impacted stakeholders are already working on, including preparations for the US transition to T+1 in May 2024, initiatives at ASX (for example, across CHESS and CHESS replacement, futures markets), approved market operators, and within each respective organisation.

11. Accelerated Settlement Taskforce Report dated March 2024, page 28, available at: https://assets.publishing.service.gov.uk/media/6603f31bc34a860011be762c/Accelerated_Settlement_Taskforce_Report.pdf

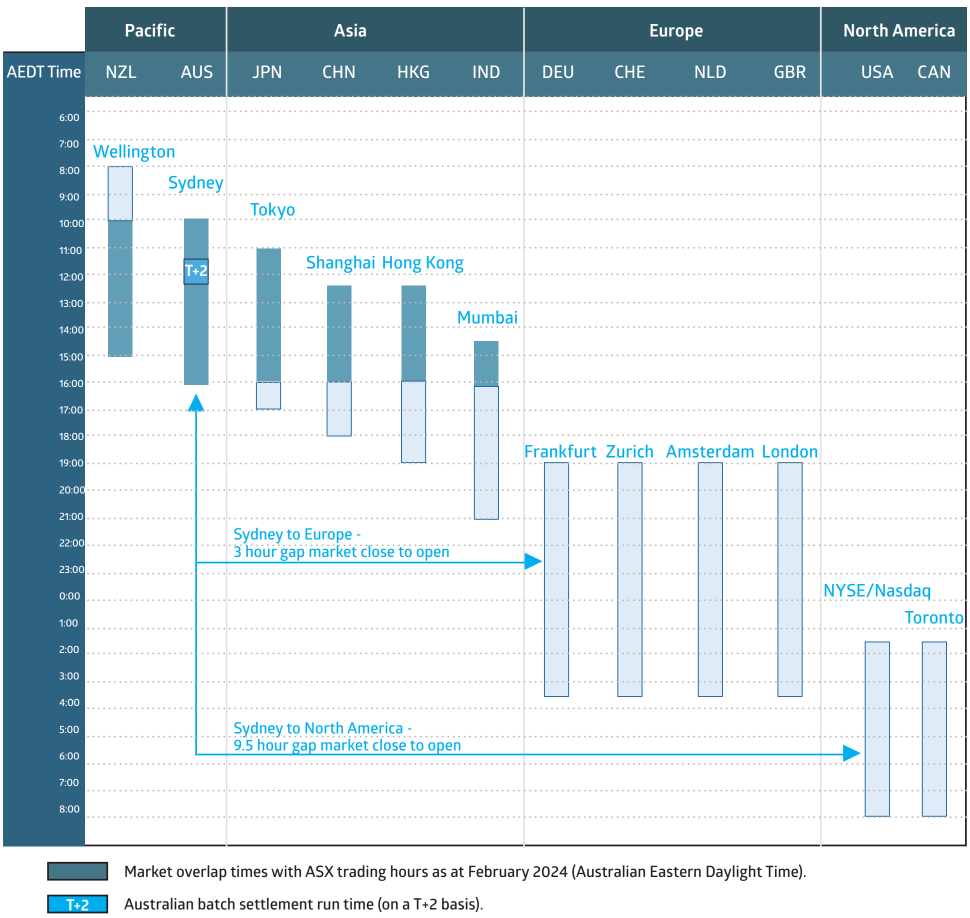
The pool of developers and staff is not unlimited, and the market's capacity to absorb change goes to the safety of the market and the global reputation of the Australian market.

2.5. Australia's position as one of the first in the 24 hour clock

Australia's geographical position and time-zone plays into consideration of settlement cycles. During Australian Eastern Standard Time (AEST), Australia is 8 and 9 hours ahead of Europe and the United Kingdom respectively, where around 8% of investments into Australia originate[12], and 14 hours ahead of USA Eastern Standard Time, where around 14% of investments into Australia originate[12]. During daylight savings (Australian Eastern Daylight Time), these time-zone differences grow to 10, 11 and 16 hours difference between Australia and Europe, the United Kingdom and the US respectively. In effect, Australia's current T+2 arrangement, factoring in the middle of the day cut-off for settlement and time-zone differences, is effectively T+1 for European and US investors currently.

Diagram 2 below compares ASX trading hours to major global markets, and shows overlap within the Pacific and Asia, but no overlap of the Australian trading day with Europe and North America. In this context, global transitions to T+1, and indeed consideration for Australia of its own move to T+1, have different impacts depending on the profile and location of the stakeholder. For example, consideration of a move to T+1 for Australia would most strongly impact the East Coast of North America and the United Kingdom, with the majority of their trade processing and matching likely to need to happen overnight, meaning that they would effectively face a T+0 environment when investing in Australia. Other regions would have incrementally better time-zone access to Australia during market opening hours.

Diagram 2



12. Orient Capital Shareholder Data Insights, Average S&P/ASX 200 register including Australian Retail, as at January 2024.

3/ Australian cash equities market considerations

Although we can leverage experiences with settlement cycle compression in international markets, the specific characteristics of the Australian market necessitate a thorough consideration of local factors. Section 3 of this paper outlines key considerations for the Australian market as identified by the T+1 Working Group. This may not be an exhaustive list of considerations, and is likely to be supplemented by responses to this Whitepaper.

Section 3 contains a number of questions, and a complete list of questions is contained in **Appendix C**.

It is clear that the impacts of settlement cycle compression would not be felt evenly across the market. Having regard to the considerations outlined below, any decision will ultimately require weighing up the costs and benefits for the Australian market as a whole.

3.1. Working assumptions

A non-exhaustive list of working assumptions about how T+1 would be introduced (if a decision was made to introduce T+1) is included below:

Factors directly relevant to settlement

- T+1 means settlement the business day after trade day
- Settlement remains DvP model 3 (i.e. netted securities and funds)
- T+1 rules should apply to all market trades and the associated client contracts (client trades) executed in Australia
- All operational settings for CHESS (and participants' and banks' interaction with CHESS) would need to be analysed, such as batch settlement cut-off time, and processes that occur prior to settlement
- The current batch settlement cut-off time would need to move to later in the day
- One daily batch settlement
- Review of corporate action timetables, operating rules and CHESS support
- Optionality regarding settlement timeframes will not be considered (i.e. one settlement time-frame market wide for cash equities).

Other factors

- Market guidelines around trade allocation/ confirmation and securities lending timings may be required
- Australia and New Zealand transition at the same time. ASX has received strong feedback to date regarding the benefits of alignment of settlement cycles between Australia and New Zealand, particularly for dual listed securities and noting the two hour time difference between the countries.

Detailed investigation, testing and consultation would be required to validate each assumption at a future date. Further consideration would also be required as to additional stakeholder processes.

This Whitepaper does not consider T+0 or atomic settlement; both represent a fundamentally different proposition to T+1 and would involve fundamental changes market-wide. Whilst it is possible that this is the ultimate destination for the Australian (and global) markets, at this point in time we wish to focus this discussion on the case for T+1, having regard to the interests of the Australian market as a whole.

3.2. Capital flows to and from Australia

Despite its relatively small share of global markets (less than 3% of the MSCI World Index[13]) approximately 29% of funds invested in Australian cash equities come from overseas[14] . Australia must maintain its reputation as a safe, dynamic, and modern investment destination. A key question is whether moving to a T+1 settlement cycle will affect capital flows into Australia.

Potential impacts:

- Time-zone disadvantage: Whether a faster settlement cycle creates challenges for international investors operating within Australia's time-zone.
- Global alignment: Whether Australia would become out-of-step with major markets like the US and Canada if it does not move to T+1.

Industry discussions on this topic have not provided conclusive answers or quantifiable data. While custodians and banks suggest Australia will remain attractive in the short term, Australia maintaining an out-of-sync settlement cycle against a global T+1 trend could impact long-term investment flows.

Q1/ Would a decision to adopt, or not adopt, T+1 settlement affect the Australian market's international competitiveness as a destination for foreign investment?

Q2/ Would Australia staying on T+2 pose any restrictions on trading volumes for trading participants?

3.3. Risk

3.3.1 Systemic risk

The Reserve Bank of Australia's (RBA's) Financial Stability Standards require that ASX Clear and ASX Settlement, as licenced clearing and settlement facility operators, have objectives that place a high priority on the safety of the facility and explicitly support the stability of the financial system and other relevant public interest considerations (Standard 2.1)[15]. In assessing any shortening of the settlement cycle, ASX must consider any systemic risk of either proceeding or not proceeding with the changes. All else being equal, a one day reduction in the settlement cycle would reduce systemic risk, in that at any point in time the quantity of unsettled obligations is lower, and there would be reduced market exposure in the event of a systemic shock that results in a default.

3.3.2 Settlement risk

The Australian cash equities market is highly efficient with very low settlement failure rates (refer to section 1.4). In the short term, settlement risk would inevitably rise immediately around a T+1 transition date, with new procedures and systems being deployed and existing processes being subjected to heightened time-pressures.

The historical trend of increased trade volumes, in conjunction with a compressed settlement cycle, could further add stress on the market side to complete all pre-settlement activities in time. It is possible that retail and institutional trade fail patterns could differ.

Q3/ Can you quantify the likely impact to your organisation's fail rate of a move to T+1 (for example, based on your organisation's experience in other markets)?

13. https://www.msci.com/documents/10199/c12db7f7-a56a-4546-aed0-d2ffd6c01414
14. Orient Capital Shareholder Data Insights, Average S&P/ASX 200 register including Australian Retail, as at January 2024.
15. Standard 2.1 for Central Counterparties: https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/201212-new-fss-ris/pdf/attachment-2.pdf, and
Standard 2.1 for Securities Settlement Facilities: https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/standards/201212-new-fss-ris/pdf/attachment-4.pdf

3.3.3 Cash market margin

Analysis by ASX over a three year time period (September 2020 to August 2023) provided the following preliminary observations for T+1, as compared to T+2[16]:

- At the overall central counterparty (ASX Clear) level: the daily percentage reduction in total cash market margin (CMM) can fluctuate substantially day-to-day, however, the rolling 3 month average daily reduction is stable at 40%.
- At the individual clearing participant level: the average percentage reduction per individual participant over the 3 year period is very similar to the overall 40% ASX Clear reduction – the largest percentage reduction is 5% higher at 45% whilst the smallest reduction is 35%.
- On average, for every $10m of CMM currently required, a clearing participant could expect to see a $4m reduction in margin resulting in an annual funding cost saving of $200k (assuming a funding rate of 5%). This would enable the clearing participant to use these funds for other purposes.
- Similarly, the overall funding cost savings across all clearing participants (using the Q1 FY24 average CMM of $341m and a reduction to $205m) would be approximately $7m. This estimated saving does not include the cost to the industry of any increase in the level of failed settlements that could result from a move to T+1.

Currently for T+2 settlement, ASX Clear calculates end of day CMM for each clearing participant, a margin settlement advice is disseminated via CHESS message the next morning around 6:00am and in the event of margin calls/withdrawals, payments are due by 10:30am/released after CHESS batch settlement (around 12:20pm) respectively. There is currently no scheduled intra-day margining process for CMM however the potential timeline for introduction is being analysed by ASX to respond to RBA recommendations.

Under the current margin arrangements a reduced T+1 settlement cycle would effectively mean ASX Clear receiving margin shortly before the settlement of the trades that the margin was intended to cover which is not an effective risk mitigant. A move to T+1 would need to consider CMM processing and scheduled times, such as an end-of-day margining process with same day settlement to ensure an appropriate timely collateralisation of exposures.

3.3.4 ASX Clear default fund

The implications of a move to T+1 on the size of the ASX Clear default fund (currently $250m) are more difficult to quantify than for CMM.

The size of the default fund is determined by the exposures of the CCP to individual clearing participants. Under the RBA's regulatory capital requirements[17], the default fund should be large enough to cover the default of the two clearing participants with the largest exposures under *"extreme but plausible market conditions"* (i.e. stressed exposures). This is referred to as the "Cover 2" requirement.

It is difficult to anticipate the impact on stressed exposures to individual clearing participants of a move to T+1 given the potential loss in offsets between trades settling on different days and the reduction in CMM from participants. In addition, the size of the default fund is very much determined by the distribution over time of the "Cover 2" stressed exposures, and particularly the "tail" of this distribution (i.e. the largest exposures over time). It is possible, for example, that moving to T+1 may reduce the average "Cover 2" requirement over time but may leave unaffected (or

16. Source: ASX Business Committee December 2023 agenda item 3a, page 8: https://www.asx.com.au/content/dam/asx/about/business-committee-agendas/2023/asx-business-committee-agenda-and-papers-6-december-2023.pdf
17. Refer to the Reserve Bank of Australia's Financial Stability Standard 4 for Central Counterparties (Credit Risk), supplementary interpretation: https://www.rba.gov.au/payments-and-infrastructure/financial-market-infrastructure/clearing-and-settlement-facilities/pdf/supplementary-guidance-domestic-derivatives-ccps.pdf.

even increase) the spikes in the "Cover 2" requirement resulting in an unchanged (or possibly increased) default fund.

In addition, the ASX Clear default fund also covers exposures from clearing equity derivatives which are currently settled on a T+1 basis and which would not be directly affected by a move of cash equity markets to T+1.

It is relevant to note that the move from T+3 to T+2 in 2016 did not result in a reduction in the size of the default fund (maintained at $250m).

3.4. Operational risks and processes

An often-cited benefit of global moves to T+1 is that the shortened settlement timeframe will necessitate further back-office automation. This trend towards back-office automation and paperless transactions was observed with the move from T+3 to T+2, however further and deeper investment in automation and straight through processing is likely to be necessary to support a move to T+1. This is particularly the case given that critical elements of stakeholders' pre-settlement processes may have to occur outside normal business hours.

Automation comes at a cost of both time and resources and will inevitably be weighed against the competing priorities of other projects and against each organisation's capacity to update their core infrastructures. While automation has the potential to bring about post trade efficiencies, concentration of risk on ageing platforms, as well as each organisation's capacity to make change, will need careful monitoring.

Increased investment in automation and straight through processing could result in improvement in operational risk, however if T+1 is implemented without (or with partial) investment in automation and straight through processing, operational risk could increase, with flow-on impacts to settlement failure rates.

It is possible that a shorter settlement cycle will move risks currently borne by the clearing house and settlement facility to decentralised institutional infrastructure.

Shorter settlement cycles also limit the time available for recovering from mistakes, outages, or issues leading to increased pressure on contingency planning.

Using sample data collected over January and February 2024, Table 1 below provides average data on the current distribution of settlement instructions received into CHESS across T, T+1 and T+2. Under the current T+2 environment, the vast majority of bilateral settlement instructions[18] are input to CHESS over the course of T+1, but almost half of unilateral settlement instructions[19] are currently input on T+2.

Table 1- Distribution of settlement instructions under T+2 settlement cycle

	Bilateral settlement instructions (%)	Unilateral settlement instructions (%)
T	5.7	1.0
T+1	86.8	52.3
T+2	7.5	46.6

18. Bilateral, or dual entry settlement instructions, enable the scheduling of a settlement between two participants. Bilateral settlements typically facilitate custodial arrangements, ensuring holdings are delivered for settlement of an underlying on-market trade.
19. Unilateral, or single entry settlement instructions, enable a participant to schedule the transfer of securities between two CHESS holdings under their control into a settlement cycle. Unilateral settlements are used to ensure that holdings are made available to settlement entrepot accounts to facilitate batch processing.

Q4/ What is the scale of investment and technology change required for your organisation to support a move to T+1 settlement, from both a cost and lead time perspective (for those organisations involved in overseas transitions would you estimate Australia to be more/less work than specific overseas markets)?

Q5/ What technology upgrades would your organisation (and clients) need to do to support T+1?

Q6/ What market-wide technology or infrastructure adoption would be needed to support a move to T+1?

Q7/ What could impact your organisation's capacity to move to T+1?

3.4.1 Trading activity and middle office processes

Front and middle office capabilities play a critical role in managing operational processes.

Given potential challenges in foreign exchange liquidity (at different times of day), cross-border investors may need to ensure seamless and real-time connectivity between their equity market trades and any associated foreign exchange orders.

In the middle office, under both T+2 and any move to T+1, trade allocations (including reconciliation of all associated broker confirmations) should be completed on trade-date – so that the relevant settlement instructions can be issued and matched in time for settlement. Global time-zone differences add a further layer of complexity for foreign investors, including staffing arrangements.

New technology models for Stock Connect (mainland China and Hong Kong) and the USA have demonstrated the ability to significantly accelerate settlement processing by using allocation instructions as their trigger and by running all settlement matching on a synchronised basis.

Q8/ To ensure all investors have time to match instructions, what options/solutions do you consider viable, or necessary, to be in place prior to any transition to T+1, such as trade matching confirmation platforms, system/rule changes etc?

3.4.2 ETF management

ETFs play an important part in the global financial landscape, and in Australia the asset class has seen rapid growth in assets under management over recent years[20]. Over 2 million Australian investors hold ETFs[21], and the asset class services domestic and foreign investors. Access to overseas markets is commonly cited as a key motivation to hold ETFs.

Considerations for the ETF community of a move to T+1 include:

- Flow types – i.e. creations or redemptions
- Investment market segments – i.e. domestic or cross border
- Extent to which Australia's settlement cycle aligns or differs from global counterparts (in particular, the US/Canada/Mexico move to T+1 in May 2024).

Discussions with investment managers as well as other key industry bodies indicates that ETFs with cross border investments face challenges regardless of whether Australia does or does not decide to move to T+1, given the US/Canada/Mexico move to T+1 in May 2024. It is not anticipated that ETFs with domestic investments would face challenges arising from a move to T+1 in Australia (or a decision for Australia to remain on T+2 notwithstanding any global market moves to T+1). Diagram 3 below sets out anticipated impacts across a number of scenarios.

20. Source: Betashares Australian ETF Review: January 2024, available at: https://www.betashares.com.au/insights/etf-review-january-2024/
21. Source: Betashares, available at: https://www.betashares.com.au/insights/etf-trends/

Diagram 3

Creation/redemption scenario	Investment market segment	AU T+2 US T+1	AU T+1 US T+1
Creation flow with investments in local holdings/investments	Domestic	N/A	●
Redemption flow with investments in local holdings/investments	Domestic	N/A	●
Creation flow with investments in foreign holdings/investments	Cross border	◌	◌
Redemption flow with investments in foreign holdings/investments	Cross border	●	◌

● = no current/anticipated issues. No further analysis proposed.

◌ = impacts anticipated

Scenario where Australia moves to T+1, US is on T+1 – ETFs with cross border investments

If Australia decides to move to T+1 after the US (and potentially other major global markets) have moved to T+1, there would be timing alignment between the domestic unit creation and redemption process flows (Australia T+1) and the settlement period for the acquired or disposed securities within the basket (US T+1).

However, time-zone differences between Australia and the US would present difficulties under both creation and redemption flows, and add significant pressure to the case for pushing Australian batch settlement cut-off to later in the day. The time buffer between the availability of index composition files (11:00am – 1:00pm on T+1 in Australia) and the unit settlement timeline (current batch settlement cut-off is 11:30am) would be highly problematic, likely requiring application of estimated Net Asset Values (NAVs) across both creation and redemption flows. The application of estimates would necessitate manual cash true ups outside of batch settlement. This would add operational risk.

Furthermore, if Australia were to move to T+1, cross border investments into markets that have not also adopted T+1 at that point in time (i.e. markets operating on T+2 or more) would present challenges for the redemption process where the transfer of proceeds from the underlying securities sold within the basket (T+2) would be executed a day later to the redemption date payable to unit holders (T+1).

Without change to the Australian batch settlement cut-off time to later in the day under a move to T+1, the workarounds noted above would significantly reduce market efficiency and increase costs; both of which would likely need to be passed on to end investors via an increased management fee or spread, with potential implications for the growth of the asset class. Functionality for cash settlements/true-ups to take place outside of batch settlement could also be required.

Scenario where Australia stays on T+2, US has moved to T+1 – ETFs with cross border investments

It is also relevant to consider the scenario where Australia decides not to move to T+1 (i.e. remains on T+2), but the US/Canada/Mexico have moved to T+1 (and potentially other major global markets have also moved to T+1). Under this scenario, there will be a misalignment between the inflow of the ETF unit creation proceeds (T+2 in Australia) and the settlement period for the acquired securities in the basket (as of end of May 2024, T+1 in US).

This could mean that ETFs may not have enough cash to settle the underlying securities in the basket on T+1 without either:

- creating an overdraft facility (resulting in interest costs); or
- accelerating the unit creation flow/process to T+1 for Australian clients. In this case estimated NAVs will need to be applied due to the lack of sufficient time available between the acquisition of the index composition files and Australian batch settlement cut-off (currently 11:30am). The application of estimates would necessitate manual cash true ups outside of batch settlement. This would add operational risk.

As with the above scenario of a move to T+1 in Australia, both of the workaround options would reduce market efficiency and increase costs, which would likely need to be passed on to end investors via an increased management fee or spread, with potential implications for the growth of the asset class. If the Australian market were to decide to remain on T+2 for the foreseeable future, the ETF industry would require and seek support to mitigate the risks arising from cross border settlement asymmetries. This could include, but not be limited to, a review into Australian batch settlement timing, a separate batch for ETFs or cash settlement options outside of the existing batch settlement.

Q9/ From the perspective of ETF issuers which scenario best fits the needs of the Australian ETF market – Australia remains on T+2 and the US (and potentially other major global markets) operates on T+1, or Australia and the US (and potentially other major global markets) operate on T+1 – and why?

Q10/ In the event that Australia adopts T+1, what potential measures need to be considered to alleviate the challenges for ETF issuers?

Q11/ In the event that Australia remains on T+2, what potential measures need to be considered to alleviate the challenges for ETF issuers?

3.4.3 Securities lending

The securities lending market in Australia is characterised by a decentralised network of bilateral relationships and has a significant impact on the efficiency and smooth functioning of the Australian equities market.

In a typical securities lending transaction, the owner of securities (often a large fund manager) will lend its securities to a borrower (for example a hedge fund) in return for a fee. The borrower may then sell those securities in the market (short selling). The term of these loans are often "open", meaning that securities must be returned to the lender on demand.

If settlement cycles shorten from T+2 to T+1, it could put a strain on securities lending. Borrowers will have less time to return securities to a lender when the loan is recalled, and could lead to settlement failures if the borrower cannot return the securities in time. This could increase costs for investors and cause operational challenges for financial institutions.

Lenders may charge higher fees to compensate for the increased risk, while borrowers may face challenges in finding securities to borrow due to the shorter time frame. In addition, securities lenders may be in a situation where they need to recall securities before they execute a trade to sell those securities in the market. This may offer a pre-trade market signal that the fund manager is about to sell securities.

Moving to a T+1 settlement cycle could result in the following challenges to securities lending:

- Increased settlement fails: with less time for recall, a higher percentage of settlements could fail, resulting in increasing costs to participants and ultimately investors.
- Reduced lending supply: lenders may restrict their inventory of securities available for lending to avoid the possibility of settlement failures (hoarding).
- Increased lending costs: lenders may charge higher fees to compensate for the increased risk and operational pressure associated with shorter recall times.
- Operational disruptions: the change in settlement cycle could require lenders and borrowers to make significant operational adjustments to improve the efficiency of recalling loans.
- Information leakage: a shorter window for recalls may lead to increased information leakage, as the lender may need to recall securities before executing trades in the market.

Shortening the settlement cycle prompts consideration of potential changes to the securities lending market in Australia including:

- changing Australia's predominately bilateral model to introduce centralised market infrastructure[22];
- exploring the possibility of a cleared market; and/or
- introduction of centralised market infrastructure to automate securities lending processes and exception handling (leveraging connectivity to established, global lending platforms).

All of the above potential changes have liquidity, cost, and timing implications. There could also be positive risk-reducing benefits to the market of adopting new technology.

Q12/ What changes would be required to the securities lending market to facilitate/enable a move to T+1 (e.g. centralised, regulatory changes)? Would the changes need to be in place prior to a move to T+1?

3.4.4 Australian banking system

Payment providers provide essential services to ASX's settlement participants, processing the net payment obligations of settlement participants as part of the daily CHESS settlement batch. Interbank settlement of these payment obligations occurs on a multilateral net basis across the ESAs of each payment provider in RITS.

Currently, there are 11 payment providers servicing settlement participants in the Australian cash equities market. The following processes facilitate funds settlement:

- Prior to CHESS settlement batch:
  - Funding preparation as required, based on settlement participant payment obligation projections and/or set funding limits

22. Refer to examples cited in RBA Bulletin December 2014 'The Equity Securities Lending Market' Box A (Centralised Market Infrastructure) https://www.rba.gov.au/publications/bulletin/2014/dec/pdf/bu-1214-5.pdf).

- During CHESS settlement batch:
    - Payment providers approve settlement participants' funding obligations
    - CHESS sends net payment provider obligations to RITS for settlement
    - Simultaneous and irrevocable settlement of obligations across payment provider ESAs in RITS in central bank money
- After CHESS settlement batch:
    - Transfer of net funds from payment providers to settlement participant accounts where the settlement participant is a net receiver

There are important on-settlement flow-on implications in both cases of a payment providers being a net receiver or net payer in any given daily batch settlement, as both necessitate on-settlement from the payment provider to the settlement participant, for the settlement participant to in turn transfer to their investor bank accounts. Where the on-settlement payment flows are being done via the SWIFT Payment Delivery System, the cutoff time for those payments to be processed is 4:30pm for many stakeholders.

Typically, based on an 11:30am CHESS settlement batch cut-off time, the CHESS settlement batch is complete by approximately 12:20pm. The deadline for a request for an extension to CHESS batch settlement cut-off is 11.15am.

Important considerations when contemplating changes to batch timing include:

- Broader intraday funding and liquidity management implications for treasury managers, and the consideration of flow-on impacts to the broader eco-system
- The need for sufficient time for recovery and management in the event of system outages, funds failures and other disaster recovery-related scenarios

From a RITS perspective, preliminary discussions with the RBA indicate that changes to the timing of the CHESS batch settlement in RITS could be accommodated for T+1, subject to appropriate operational and contingency procedures being in place.

Existing key timings include:

- 11:30am – CHESS settlement batch cut-off
- 1:00pm – CHESS notification to payment provider of their settlement participants' obligations
- 60 minutes[23] post CHESS notification of settlement participant obligation – Payment Provider authorisation
- 3:00pm – CHESS cut-off for submission of batch to RITS for settlement processing
- 4:30pm – cut-off for CHESS batch submission and settlement in RITS under normal operations[24]
- 5:15pm – end of the day for most RITS participants. The CHESS batch contingency arrangements allow the batch to be submitted and settled up to this time in exceptional circumstances only.

Q13/ What are the key changes that would need to be made to the CHESS batch settlement process to facilitate T+1 settlement (including potentially moving the batch settlement in RITS to later in the day)?

Q14/ In the broader banking eco-system, what (if any) changes would be required to facilitate post-CHESS batch settlement processes?

3.4.5 Fixed income settlement cycles

Whilst the focus of this Whitepaper is cash equities, interdependencies with other security classes exist.

There are a number of debt market conventions for settlement and in 2016, AFMA coordinated the move from T+3 to T+2 for fixed income, to complement the

23. 60 minutes after the Client Payment Provider is notified by ASX Settlement and in an event no later than 2.30pm.
24. Refer to the RITS Overview of Functionality User Guide for further information on RITS session times: https://www.rba.gov.au/rits/info/pdf/Overview_of_Functionality.pdf

move to T+2 for cash equities in Australia and New Zealand[25]. AFMA has not received any feedback from fixed income market participants proposing a shift to shortened settlement cycles for debt and credit securities. If there is a firm intention for cash equities to move to T+1, AFMA would again seek views from the market, and, if the market so determined, coordinate relevant fixed income markets also moving to T+1.

3.4.6 Derivatives

Underlying cash market trades resulting from the exercise of an Exchange Traded Option (ETO) clear and settle in CHESS.

Currently, when an ETO is exercised, ASX Clear notifies participants of the resultant trade on the morning after the exercise process, effectively on T+1, which results in an already compressed timeline to achieve settlement on a T+2 basis.

In addition, securities may be reserved in CHESS as collateral to cover ETO positions. Once reserved, the participant relinquishes control over the securities to ASX Clear until they are released by ASX Clear.

CHESS has no records of the underlying derivatives activity being covered. Where a participant is notified of an exercise and held collateral is required to facilitate settlement of an exercise transaction, the participant must request the withdrawal of the collateral. If the held collateral is not eligible to be released by ASX Clear, controlling participants will need to arrange alternative collateral to facilitate the release. In this scenario, processing times across multiple systems can result in unintended failed settlements. ASX notes that there are existing processes around fail fee reversal under these circumstances.

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, and the frequency of fails under these circumstances may be impacted by a change to T+1. Further consideration and analysis is required.

3.5. Stakeholders

3.5.1 Intermediaries

Intermediaries include organisations who act for issuers or investors (such as custodians and share registries). A move to T+1 could impact the operational model for intermediaries in a number of ways:

- Account opening: greater pressure to open (or update) client trading accounts by trade-date and hence greater use of automated account opening technologies
- Trade execution: real time connectivity to foreign exchange and other trade-related processes
- Foreign exchange: increased use of different, bilateral foreign exchange mechanisms
- Funding and risk management: real time cash and funding management
- Allocations and confirmations: accelerated and more automated client confirmation processing
- Settlements: automated trade matching, trade status management (including real-time monitoring), exception management (and fails management in the case of custodians)
- Securities lending: real-time instruction processing (for loans, collateral and recalls) and real-time inventory management
- Corporate actions: real-time processing of corporate events (and associated static data changes) and real-time inventory management; corporate action timetables and settlement management (refer to section 3.5.3 below)
- Reconciliations: increased reconciliation processes throughout the day (from end-of-day to real-time).

25. AFMA Media Release dated 19 August 2015: https://www.afma.com.au/media/2015_08_19_AFMA_T2.pdf. Market conventions can be found at: https://afma.com.au/standards/market-conventions

In providing these services for investors across the world, many intermediaries need to provide these services across multiple time-zones, leveraging new or existing resources outside of Australia. Within these teams, careful consideration would need to be given to the delegation of decision-making responsibilities, to ensure that all core tasks (such as foreign exchange) can be completed throughout the full T to T+1 cycle.

Intermediaries who provide services to or trade dual-listed companies already face time-zone and settlement cycle variation globally today, but the impacts of further settlement cycle compression could further complicate cross border trading and settlement.

Registry processing of shareholder reference numbers (SRNs) under an SRN enquiry form (commonly referred to as a '12A' form) may require further industry analysis to accommodate a move to T+1.

3.5.2 Investors – domestic and global

ASX is not aware of strong demand from domestic investors (both retail and institutional) to move to T+1.

Whilst pre-funding is a common occurrence amongst retail investors, a move to T+1 could necessitate pre-funding for institutional investors.

While investors are likely to face many of the same automation and real-time processing pressures as their brokers, those investing into Australia from overseas would also face a number of specific considerations. These include:

- Allocations: investment managers who wish to block trade would need to ensure that all allocations are completed and confirmed on trade-date
- Foreign exchange: these same investment managers would also need to ensure that they have sufficient access to AUD liquidity when they need it – most likely meaning a shift in their foreign exchange execution and booking models
- Funding and treasury: Where a fund manager may settle a fund subscription on (for example) T+3 in Europe, they would need to fund their buy-order in Australia on T+1 (instead of T+2), meaning that they have to fund two days of credit exposure (versus one day today). This funding requirement would need to be carefully managed in order to avoid a significant increase in funding and treasury costs for fund managers into Australia – and reduced attractiveness of the Australian market. Changes to staffing requirements may also be required, with a potential need for staffing over Australian time-zones where it was not previously required.

Q15/ Please provide perspectives from investors (both retail and institutional) regarding demand to move to T+1?

Q16/ Please provide information on the impacts of a move to T+1 in Australia on global investors (including investors who use intermediaries), and what pre-conditions or tools would need to be in place to support a move to T+1?

Q17/ For investors requiring foreign exchange to fund trades, if Australia moved to T+1 would you be able to fund AUD bank accounts in time for daily settlement, and if not, what changes or solutions would be required to make this viable?

3.5.3 Issuers/listed companies, corporate actions

All existing corporate action timeframes as outlined in Listing Rules and supported in CHESS remain in force while the strategic case for a move to T+1 is under consideration.

Potential corporate action impacts on issuers with securities or products listed in Australia for a move to T+1 include:

- Timetable changes: transitioning to T+1 would likely require aligning corporate action timelines with the new settlement cycle (as was the case when Australia moved from T+3 to T+2). The Ex-date and record date for an event would likely fall on the same business day, and cum event trades would settle T+1 on the record date to support the determination of holder entitlement to that event. Such changes would require Listing Rule, appendix/online form amendments and administrative updates, with the aim to minimise exception management.
- Corporate action event types supported: subject to detailed analysis, ASX would expect to continue to support all corporate action events under both the current T+2 settlement cycle and any move to a T+1 settlement cycle, noting consideration would be needed for dual listed issuers who announce events in both markets (potential misalignment of timetables).

Considerations for participants and intermediaries:

- Corporate actions functionality: The need to retain "cum entitlement balance" (CEB) functionality under T+1 would be important to evaluate (especially for security lenders if they need to deliver stock on an ex basis).
- CHESS support: CHESS corporate action diary adjustments to protect entitled holders in cases of failed settlements will need to continue, even if failed settlements become more frequent under T+1.
- Claims processes: Further assessment is necessary for other claims processes. This may necessitate new mechanisms, such as deadlines for protection requests and agreements on pre-funding to facilitate protection.
- American Depository Receipts (ADRs) and CHESS Depository Interests (CDIs)[26]: Existing time-zone misalignments for these instruments should be reassessed considering any settlement period changes.

Areas for further investigation:

- Issuer-specific impacts: more detail could be useful in outlining impacts on specific issuers, especially dual-listed issuers.
- Accelerated offers: analysis of the various types of accelerated offers (with different timetable scenarios).
- Claims scenarios: analysis of specific types of claims processes that a shorter settlement cycle might complicate.

Q18/ Please provide further information on the impacts of a move to T+1 on issuers, including changes that would be required to support issuers in a move to T+1?

3.6. The implications of not moving to T+1 for Australia

Strategic consideration needs to be given to the implications of any decision for Australia not to move to T+1, noting this conclusion may change over time. From a harmonisation perspective, the implications are dependent on decisions in major markets regarding settlement cycle compression; the world currently operates across time-zones and historically has operated across different settlement cycles globally. The risk of Australia being 'left behind' materialises to the extent that staying on T+2 makes Australia a less attractive destination for global investment, and if the costs of staying on T+2 outweigh the benefits.

26. For more information on CDIs: https://www.asx.com.au/documents/settlement/CHESS_Depositary_Interests.pdf

4/ Conclusion

It is timely to assess the case for accelerating cash equities settlement in Australia to T+1. In this Whitepaper, we have outlined a number of important strategic considerations for the Australian market. We invite your responses to understand aspects of the Australian market that would need to change to support T+1, and ultimately to determine next steps. The outcomes of the transition to T+1 in the USA, Canada and Mexico in May 2024, as well as the outcomes of considerations in the United Kingdom and Europe, will provide critical global context as we assess the strategic case for the Australian market as a whole.

Appendix A - T+1 Working Group membership

Company	Name	Title
ASX Limited (Markets)	Rob Nash	Senior Manager, Head of Equities Relationship Management, Markets, Trading Services
ASX Limited (Securities and Payments) – Working Group Chair	Andrew Jones	General Manager, Equities
Australasian Investor Relations Association (AIRA)	Ian Matheson	Chief Executive Officer
Australian Custodial Services Association (ACSA)	Andrew Gibson	ACSA Director and Executive Sponsor, ACSA Operations Working Group
Australian Financial Markets Association (AFMA)	Damian Jeffree	Senior Director of Policy
BNP Paribas	Mark Wootton	Client Line Co-Head Asia Pacific
BoardRoom	Martin Jones	General Manager Corporate Governance & Director
Cboe Australia Pty Ltd	Benjamin Phillips	Senior Director - Head of Product Development
Citi	Christopher Moore	Senior Vice President, Custody and Clearing Product, Australia & New Zealand
Commonwealth Securities Limited	William Berriman	Senior Manager – CommSec Operations
Computershare	Scott Hudson	General Manager – Market Liaison
FinClear Services Pty Ltd	Leigh Conder	Chief Operating Officer
Goldman Sachs Australia Pty Ltd	Marton Laszlo	Executive Director
Morgans Financial Limited	Daniel Spokes	Director, Client Support Services
Stockbrokers and Investment Advisers Association (SIAA)	Judith Fox	Chief Executive Officer
UBS Securities Australia Ltd	Conor Foley	Senior Business Manager
WealthHub Securities Limited	Julie Mason	Head of Operations

ASX also acknowledges the contribution of Barnaby Nelson, Chief Executive Officer of the ValueExchange.

Appendix B - Australia's move from T+3 to T+2

Key changes made when the Australian market moved from T+3 to T+2 included[27]:

- The CHESS batch settlement cut-off time was adjusted from 10:30am to 11:30am (including a reduction in the payment provider authorisation cut-off to 60 minutes).
- The ex-period for corporate actions was aligned with the new settlement cycle, reducing to 2 business days.
- The timing of returning CMM payments from ASX to clearing participants was delayed by 30 minutes, to 12:30pm. Clearing participant cash market margin payments to ASX maintained the original settlement requirement of 10:30am.
- CHESS netting and related messaging were rescheduled to occur on the night of the trade date (T, Settlement Date minus 2 business days), instead of T+1.
- Trade cancellations through Approved Market Operators (AMOs) were limited to the trade date (T), a change from the previous allowance up to T+1.
- Reduced timings for close out notifications.
- Related changes to ASX ReferencePoint reporting, including ex dates and settlement dates.
- Revised settlement calendar, operating rules and procedures.

A number of changes were required for participants and other impacted stakeholders.

The move to T+2 in 2016 brought several key benefits to the Australian cash equities market:

- With a drop in regulatory capital required to mitigate risk, clearing participants experienced a reduction in their liquid capital requirements. For example, February to April 2016 comparisons showed a reduction of 17%.
- Daily CMMs ranged 25-30% lower, resulting in an $80-$85m reduction in total margin payments, with a consequent saving in funding costs for the industry.
- Changes by industry stakeholders including participants realised greater post trade operational and process efficiencies with associated cost savings, examples being reduction or removal in use of cheques, contra arrangements, cash up front for trades, electronic contract notes.
- The maintenance of high settlement efficiency, with failed settlement rates following the change remaining at or below previous levels.

27. For further information, see https://www.asx.com.au/documents/settlement/T2_Settlement_Business_and_Technical_Overview_updated 12Mar2015.pdf

Appendix C - Request for responses

Impacted stakeholders

The considerations for and impact of shortening the settlement cycle in Australia would not be felt evenly across stakeholders. As such, we actively encourage responses from all impacted stakeholders including:

- Payment banks
- Listed entities and investment product (ETF) issuers (including foreign domiciled entities), and their share registries
- Brokers, clearing and settlement participants (including retail, institutional and custodians)
- Approved market operators
- Foreign institutional investors
- Securities lenders
- Foreign exchange dealers
- Superannuation funds, investment funds, and funds managers

ASX is actively engaged with the New Zealand Stock Exchange (NZX) and the Reserve Bank of Australia (RBA).

Format to respond to questions

ASX prefers to receive responses using the electronic form available here.

You will be requested to provide the following information as part of your response:

Page 1 (all questions mandatory):

- Name
- Position title
- Organisation name
- Email address
- Do you want your response to be confidential?
- What role does your organisation play in the Australian market?
- Do you wish to upload a PDF document to respond?

Pages 2 and 3: Your responses to the questions asked throughout this Whitepaper (all questions optional)

1. Would a decision to adopt, or not adopt, T+1 settlement affect the Australian market's international competitiveness as a destination for foreign investment?
2. Would Australia staying on T+2 pose any restrictions on trading volumes for trading participants?
3. Can you quantify the likely impact to your organisation's fail rate of a move to T+1 (for example, based on your organisation's experience in other markets)?
4. What is the scale of investment and technology change required for your organisation to support a move to T+1 settlement, from both a cost and lead time perspective (for those organisations involved in overseas transitions would you estimate Australia to be more/less work than specific overseas markets)?
5. What technology upgrades would your organisation (and clients) need to do to support T+1?
6. What market-wide technology or infrastructure adoption would be needed to support a move to T+1?
7. What could impact your organisation's capacity to move to T+1?
8. To ensure all investors have time to match instructions, what options/solutions do you consider viable, or necessary, to be in place prior to any transition to T+1, such as trade matching confirmation platforms, system/rule changes etc?
9. From the perspective of ETF issuers which scenario best fits the needs of the Australian ETF market – Australia remains on T+2 and the US (and potentially other major global markets) operates on T+1, or Australia and the US (and potentially other major global markets) operate on T+1 – and why?
10. In the event that Australia adopts T+1, what potential measures need to be considered to alleviate the challenges for ETF issuers?
11. In the event that Australia remains on T+2, what potential measures need to be considered to alleviate the challenges for ETF issuers?
12. What changes would be required to the securities lending market to facilitate/enable a move to T+1 (e.g. centralised, regulatory changes)? Would the changes need to be in place prior to a move to T+1?
13. What are the key changes that would need to be made to the CHESS batch settlement process to facilitate T+1 settlement (including potentially moving the batch settlement in RITS to later in the day)?

14. In the broader banking eco-system, what (if any) changes would be required to facilitate post-CHESS batch settlement processes?

15. Please provide perspectives from investors (both retail and institutional) regarding demand to move to T+1?

16. Please provide information on the impacts of a move to T+1 in Australia on global investors (including investors who use intermediaries), and what pre-conditions or tools would need to be in place to support a move to T+1?

17. For investors requiring foreign exchange to fund trades, if Australia moved to T+1 would you be able to fund AUD bank accounts in time for daily settlement, and if not, what changes or solutions would be required to make this viable?

18. Please provide further information on the impacts of a move to T+1 on issuers, including changes that would be required to support issuers in a move to T+1?

Two additional questions:

19. How much lead-time would your organisation (including service providers) require before implementation if a decision was made to move to T+1 in Australia?

20. Is there any other feedback or information you would like to share?

Page 4: Your response to two additional summary tables (responses to any aspects of the first table are optional, responses to all aspects of the second table are mandatory)

Regardless of what you indicated about your response being confidential, all responses to the second table will be treated as confidential by ASX.

Table 1

	For T+1	
	Case for T+1 (reasons)	Risk considerations to support a su imp
Capital flows		
Systemic risk		
Settlement risk		
Cash market margin		
ASX Clear default fund		
Operational risks and processes		
Trading activity and middle office processes		
ETF management		
Securities lending		
Australian banking system		
Fixed income settlement cycles		
Derivatives		
Intermediaries		
Investors – domestic and global		
Issuers/listed companies, corporate actions		
Implications of not moving to T+1		
Other		

	Against T+1	
associated with T+1 (what is needed uccessful transition) – thematic, plementation or other	Case against T+1	Risk considerations associated with not moving to T+1 (what is needed to stay T+2) – thematic, implementation or other

Table 2

	Your organisation's conclusion on T+1
Capital flows	
Systemic risk	
Settlement risk	
Cash market margin	
ASX Clear default fund	
Operational risks and processes	
Trading activity and middle office processes	
ETF management	
Securities lending	
Australian banking system	
Fixed income settlement cycles	
Derivatives	
Intermediaries	
Investors – domestic and global	
Issuers/listed companies, corporate actions	
Implications of not moving to T+1	
Other	
Overall organisational conclusion	

l (For T+1, Against T+1, Not applicable)	Conclusion weight (High, Medium, Low, Not applicable)

For general enquiries, please contact:
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ASX