Consultation Paper
Shortening of the settlement cycle: The move to T+2

12 November 2014
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Introduction

NZX Limited (“NZX”) is proposing to move to a shortened trading settlement cycle from the current trade date plus three business days settlement (“T+3”) to a trade date plus two business days settlement (“T+2”) for cash market trades on its markets. Due to the importance of the settlement cycle to the broader market, NZX considers it appropriate to consult on the proposed change, to better understand how the change will impact market participants.

The reasons for the proposed change, the key impacts resulting from the change and the proposed timetable for implementation of the change, are set out in this consultation paper.

The move to T+2 will most obviously impact clearing participants. However, NZX encourages all participants in the markets, including brokers, issuers, registries, and retail and institutional investors, to consider the information in this document and how a shortened settlement cycle may specifically impact them.

Request for submissions

NZX seeks submissions on the proposed move to T+2 including feedback on the outlined reasons for, and impacts of, the move as detailed in this paper. Throughout this document NZX has posed specific questions relevant to an assessment of the impact of the proposed move. NZX also seeks additional comments respondents may have about the proposal.

Please provide comments in electronic format.

NZX may publish comments received. Please indicate in your submission if you have any objection to the release of information contained in your submission.

Please send your submission before 5.00pm 22 December 2014 to: consultation@nzx.com

If you have any queries in relation to this paper, please contact:

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Part I - Background to the proposal

A T+3 settlement cycle has been standard market practice across global markets in recent years. The risks to participants and the market arising in respect of the three day delay between trade execution and settlement are managed in a number of ways, for example the requirements for market participants to meet capital requirements and the provision of collateral to a central counterparty in respect of outstanding settlement obligations.

The increased use of electronic communication and upgrades to systems in the broader industry, has allowed for settlement to occur more quickly, making a shortened settlement cycle a possibility. A move to a shorter settlement cycle is being considered across markets globally, in order to reduce risks and costs associated with the settlement cycle.

NZX has been considering the requirements and impacts of a possible movement from a T+3 to T+2 settlement cycle, in particular in light of ASX Limited’s (“ASX”) announcements that it is proposing a move to T+2 early in 2016. Currently the NZX and ASX settlement cycles are aligned at T+3 and NZX is of the view that the settlement cycles of NZX and ASX should continue to be aligned.

A shortened settlement cycle will have a number of flow on effects on the settlement process and is likely to require systems and process changes for clearing participants, other market participants and investors. This consultation paper addresses these points and seeks feedback on the impact of changes to the current settlement process.

Industry Support for move to T+2

NZX has completed informal discussions with a range of industry participants on the move to T+2. Initial feedback from industry participants has indicated that there is strong support across the industry for a move to a shorter settlement cycle, with many recognising the benefits for the industry, including a reduction in risk and the continuance of alignment of the settlement cycle in Australasia.

Move by Australia and rest of world

Earlier this year, ASX published a consultation paper seeking industry feedback on the introduction of a T+2 settlement cycle for cash equities in Australia. The Boards of ASX Clear and ASX Settlement have formally accepted a recommendation from the Forum, an industry stakeholder group established under the Code of Practice for Equity Clearing and Settlement in Australia, that implementation of a T+2 settlement cycle for cash equities be targeted for early first calendar quarter 2016. NZX proposes to transition to a T+2 settlement cycle at the same time as ASX in order to maintain alignment of settlement cycles in the New Zealand and Australian capital markets.

The proposed move by Australia and New Zealand is consistent with a wider move around the world from T+3 to T+2.

European Union member states are required by European directive to move to a T+2 settlement cycle by 1 January 2015. The majority of member states, including the United Kingdom, moved to T+2 on 6 October 2014.

NZX also understands that the Depository Trust & Clearing Corporation, which settles the majority of securities transactions in the United States of America, has established an industry steering group and working committee to implement a T+2 settlement cycle in the United States.
In terms of Asian markets, Hong Kong already settles on a T+2 basis, with a number of countries in Asia considering the move to a shortened settlement cycle, including Singapore and Japan.

As international trading firms make the required adjustments to systems for T+2 settlement in some jurisdictions, it is likely that firms will want to see settlement timeframes around the world standardised.

**NZX’s settlement system**

NZX is New Zealand’s sole registered securities exchange and is currently licensed under the Securities Markets Act 1988 to provide a platform for securities trading and settlement.

In 2009 NZX implemented a clearing and settlement system comprising a clearing house and securities depository (the “NZCDC Settlement System”). The NZCDC Settlement System includes a clearing house (“NZCL”) which acts as a central counterparty to novate, net, clear and settle trades between participants. All trades executed on NZX’s markets settle through the NZCDC Settlement System, which is regulated jointly by the Reserve Bank of New Zealand and the Financial Markets Authority.

All trades completed on NZX’s securities markets settle on a T+3 settlement cycle. This means each trade is required to be settled on the third business day after the trade is executed. Participants therefore have three business days to take all actions required to settle trades, including the provision of funds and securities. It also means that change of ownership in the securities completes a minimum of three business days after the transaction has occurred.

Securities transactions are settled on a net basis in two daily batch cycles. Batch settlement occurs twice daily at 11.00am and 3.00pm. The settlement process involves determining clearing participants’ net funds and security delivery obligations and settling these through settlement accounts.

Should a trade settlement fail by reason of a failure to deliver securities, the clearing participant required to deliver the securities may be allowed up to four further trading days (“Fail Days”) after the settlement day to complete the outstanding settlement. If a clearing participant is unable to settle after four Fail Days, NZCL either buys in or closes out the position on behalf of the participant. The clearing participant who failed to make delivery of securities on time may be subject to penalties, and other regulatory action by NZCL, depending on the circumstances.
Part II – Reasons for the move to T+2

NZX considers the main reason for shortening the settlement cycle to T+2 settlement to be the reduction of risk. A shortened settlement cycle should reduce the risk to all of those involved in the settlement process, including NZCL, clearing participants and individual investors. Related to this, due to decreased risk, a shortened settlement cycle should lead to savings in the costs associated with management of this risk, for example a reduction in the capital requirements related to settlement risk.

Further details on the reduction in risk from a move to T+2 and the flow on effect on capital requirements, are set out in further detail below. NZX seeks feedback to understand the impact of these changes.

Reduction of risk

A shortened settlement cycle should reduce the number of unsettled trades at any point in time, as there will only be two days worth of trading unsettled, rather than three. This means that on any day, NZCL and clearing participants will be exposed to fewer unsettled trades, as trades will be settled sooner than at present. Similarly, the period for which NZCL and clearing participants are exposed in respect of an individual unsettled transaction will also be reduced by one day. Consequently, the overall exposure to unsettled transactions for an individual clearing participant is likely to be lower.

The reduction in the number of unsettled trades for clearing participants will, in turn, likely reduce the level of a clearing participant’s exposure to default by their clients (reducing the counterparty credit risk between clearing participants and clients). It may also free up liquid capital and could in turn, increase trading levels, as NZX participants and investors will have capital available to trade with after two days instead of three.

The reduction in overall risk exposure for NZCL and for individual participants should have a flow on effect in reducing systemic risk for all market participants.

Q1: What level of risk reduction, if any, do you think there will be for your firm?

Q2: What areas are there where the level of risk may increase?

Cash market margin savings for participants

Currently NZCL requires a daily cash market margin from clearing participants based on their net open positions, as one of a number of tools to manage the risk of a clearing participant failing to settle. A margin is calculated at the end of each trading day, based on historical price volatility, current and anticipated market conditions and other relevant market factors. The participant is required to provide collateral to meet that margin call the following morning before trading commences. This process occurs every trading day in respect of all outstanding net open positions.

A shorter settlement cycle will likely result in a cash market margin saving for clearing participants compared to the current level of cash market margin that participants are generally required to provide.

Given the proposed reduction in the length of the settlement cycle, on any day, clearing participants will be exposed to two days outstanding settlement obligations, instead of three days. NZX has reviewed the cash market settlement obligations of clearing participants from August 2013 to July 2014. The change of settlement cycles from three days to two days over this 12 month period could be expected to provide cash market margin saving benefits as follows:
- A reduction of 28% of average daily margin requirements across the whole market, from $11,830,838 to $8,521,789;

- The average daily margin requirement to cover all trades outstanding for a single clearing participant ranges from approximately $3,995,379 to $27,865,019. This would reduce to a range of $2,931,994 to $23,985,515 under T+2 settlement;

Q3: What do you consider the cash market margin saving would be for your firm? Would this be a significant benefit?

Q4: What impact do you consider the cash market margin saving would have on the market as a whole?

Liquid capital requirement savings for participants
Under the NZCL Clearing and Settlement Rules (“Clearing Rules”), clearing participants are required to meet the capital adequacy requirements to manage the risk of a clearing participant failing and not being able to settle its trades. A clearing participant must at all times maintain its Net Tangible Current Assets (“NTCA”) at the level required by the Clearing Rules, which is calculated in part by the size, and number, of unsettled trades that a clearing participant has with each of its clients. Similar requirements apply to NZX Participants under the NZX Participant Rules (“Participant Rules”).

With a reduced settlement cycle, participants should be exposed to fewer unsettled obligations with their clients on a daily basis. Participants should therefore require a lower level of NTCA to cover the risk requirement on the transactions related to NZX instruments. The extent of saving on NTCA for participants depends on the individual transactions with each of their clients. For the market as a whole, the aggregate trading value over two days is about $150 million less than the total value traded over three business days.

Q5: What level of liquid capital requirement saving do you foresee for your firm and what will the impact of this be on you and your clients?

Capital considerations for the central counterparty
The reduction in aggregate outstanding exposures to NZCL, as the central counterparty, also indicates NZCL may require less risk capital to cover the potential losses in case of participant default. NZCL calculates its risk capital requirements according to what the forecast maximum loss would be should the clearing participant with the historically largest exposures default on its obligations to NZCL. Should the settlement cycle be decreased as proposed, the forecast maximum loss may be lower as the clearing participant with the largest exposure would have a lower exposure, due to being exposed to two days worth of trades rather than three. This may decrease the amount NZCL would be required to hold to cover the risk capital requirement.

In the current market environment, NZX predicts the savings on the NZCL risk capital requirement to be approximately 5%. The extremely high exposures held by the largest participant usually results from transactions executed on individual large trading days, which is mainly related to index rebalancing or other one-off events. Under both T+2 and T+3 settlement cycles, the likely maximum exposure due to settle on one particular business day will be greater than the outstanding exposures due to settle on other days.

Submissions
NZX seeks responses to the questions outlined above, and welcomes comment and feedback on the outlined reasons for the move to T+2. In addition, NZX invites comment on whether there may be other reasons for a move to T+2.
Part III – Key impacts of the move to T+2

NZX has considered what impacts may result from a move to T+2. The impacts outlined below will affect the whole market to varying extents and changes to systems and processes may be required to increase efficiency in the market and ensure that trades can settle in the shorter time period, without increased risk of settlement failure. NZX seeks feedback on the impacts outlined below and how they will affect the market and all participants.

Impacts relating to retail clients
One issue highlighted by participants in NZX’s informal discussions on a move to T+2 was the shorter time frame for firms to obtain funds and securities from retail clients where client buys have been executed without cleared funds, or client sells have been executed where the participant does not have custody of the securities sold.

While brokers will have existing processes in place to receive client funds, NZX understands that brokers may need to change their processes to ensure retail clients provide monies and the securities required for settlement in a shorter time frame. It may be that an increased use of electronic payment systems and communication will be required.

The pressures arising from the shortened settlement cycle may also require more immediate action from retail clients to settle trades, or for more retail clients to use custody services of brokers.

Furthermore, there may be increased pressure on the registries in respect of the transfer of securities on register and on firms in respect of the uplift of securities from the registry and lodgement into the NZCDC Settlement System. NZX considers that a move to T+2 can easily be accommodated within the current registry arrangements.

NZX seeks comment on the extent to which a shorter timeframe to receive retail client funds or take delivery of securities may create issues for brokers, clearing participants or registries and the changes to processes that may be required to ensure trades completed for retail clients can be settled within a T+2 settlement cycle.

Q6: What issues do you foresee in receiving retail client monies and securities in a shortened settlement timeframe?

Q7: What steps do you consider brokers, clearing participants or registries could take to address these issues?

Q8: Do the increased risks (if any) associated with obtaining retail client monies and securities in order to settle outweigh the benefits of moving to a shortened settlement timeframe?

Management of settlement risk
Currently, when a clearing participant fails to deliver securities by the required settlement day, the outstanding obligation is carried forward for a maximum of four Fail Days (with the first Fail Day being the day after day on which the trade should have settled). If the participant has not delivered the outstanding securities by close of business on the fourth Fail Day, NZCL will buy-in the securities on the relevant market on the following trading day. If the buy-in fails, the outstanding obligation is cancelled and replaced with an obligation to pay an amount calculated in accordance with the Clearing Rules.

It is proposed that this policy will continue to be applied under a T+2 settlement cycle. However, with the shortened settlement cycle, the overall period before NZCL would normally buy in securities would be six trading days (being T+2 settlement plus four Fail Days), rather
than seven trading days (being T+3 settlement plus four Fail Days) under the current arrangements.

The settlement failure rate for cash equities in New Zealand (being a failure to deliver securities on T+3) is extremely low, with the average rate of daily settlement failure for deliveries of securities being 0.17% over January to June 2014. The large majority of these settlement failures are for one day only with settlement occurring on the first Fail Day. NZX considers that there is a possibility there will be a small increase to this settlement failure, due to the shorter period to deliver products, especially while the market adjusts to this shortened cycle.

Participants that fail to deliver securities on the scheduled settlement date are levied with a daily fine. The current fine is NZD$559 plus 0.06% of the trade value outstanding. NZX does not propose to increase the financial penalties with the introduction of T+2.

There will be no change to NZCL approach in respect of a clearing participant’s failure to pay money at the required settlement time as a result of a change to a T+2 settlement cycle.

Q9: What impact do you consider moving to T+2 will have on a clearing participant’s ability to settle trades?

Q10: What steps do you consider participants can take to reduce any increased risk of settlement failure arising out of moving to T+2?

Q11: Does the increased risk of settlement failure increase outweigh the benefits of moving to a shortened settlement timeframe?

Institutional settlement instruction matching
Settlement failure can result from inaccurate settlement instructions between institutional clients and clearing participants. Where a broker has been instructed to purchase shares on behalf of a number of a funds, the custodian for that fund will then be issued with instructions to settle. If the instructions given to the custodian do not match the contract with broker, the custodian will need to confirm the instructions, including whether any alterations are needed so that the trade can settle.

A shorter settlement cycle under T+2 may require increased accuracy in settlement instructions as well as quicker turn around in amendments to inaccurate settlement instructions. While this may lead to greater efficiency in the market, action would be required by participants to drive this efficiency. A failure to match settlement instructions may result in increased settlement failure.

Q12: What impact does inaccurate institutional settlement instruction matching currently have on your firm?

Q13: What changes do you see being required to these processes in order to adapt to a shortened settlement cycle?

Settlement by Institutional Investors using NZClear
In New Zealand, many large institutional investors hold securities with NZClear, a real time settlement system operated by the Reserve Bank of New Zealand. The arrangements for transfer of securities between the NZCDC Settlement System and NZClear, mean that clearing participants are usually able to settle with their institutional clients on the same day that they settle with NZCL. This is because clearing participants are able to move securities between the NZClear System and the NZCDC Settlement System throughout the day.
NZX considers that a move to T+2 will not have any impact on clearing participants being able to settle with their clients in NZClear.

**Q14: What are the possible impacts for NZClear participants arising as a result of a move to T+2?**

**Securities lending**

Market practice includes the use of securities lending to settle short positions. Where a participant takes a short position in a security, they may borrow securities from another participant to settle that position within the settlement timeframe and then purchase securities at a later date to cover the securities loaned to them. A move to a shortened settlement cycle may increase the level of securities lending, as a participant who has taken a short position will only have two days, rather than three days, to obtain securities to settle the short position.

**Q15: What impact will a shortened settlement cycle have on securities lending or borrowing undertaken by your firm?**

**Impact on corporate actions and the ex period**

The NZX listing rules require issuers to give prior notice of the record date for a corporate action, being any entitlement, right or obligation relating to a security quoted on an NZX market (for example, where a dividend or interest is to be paid).

The record date is the date fixed by an issuer for the purpose of determining its security holders who are entitled to receive an entitlement, right or obligation relating to a security.

The ex period is the period preceding the record date during which any trades executed will not be settled in time for the purchaser’s name to be registered as the holder of the securities on the record date (“Ex Period”). An investor who buys a security during an Ex Period will not receive the relevant entitlement, right or obligation attached to the security. Under the current rules, the Ex Period on NZX markets begins on the second business day before the record date (“Ex Date”) and is aligned with the current T+3 settlement cycle – ie the settlement cycle and the Ex Period are both three business days long.

In conjunction with implementing a T+2 settlement cycle, NZX proposes to maintain the alignment between the Ex Period and settlement cycle by reducing the Ex Period for all corporate actions and applicable reorganisations of capital by one business day. Consequently, a two business day Ex Period will apply, meaning the settlement cycle and the Ex Period will both be two business days, instead of three business days, and the Ex Period will commence on the first business day prior to the record date.

NZX does not expect the change to the Ex Period to have a major impact on issuers and it will not affect the requirement for issuers to give prior notice of the record date for a corporate action. Although issuers will need to be aware of the change to T+2 and the Ex Period when setting corporate action timetables, for example when explaining the terms of participation in Dividend Reinvestment Plans. A shortened Ex Period may also result in extra pressures on the registry when completing complex corporate actions, which may mean earlier suspension of trading in some cases to allow sufficient time for the Registry to take the required steps to enable the corporate action.

ASX has indicated that if it implements a T+2 settlement cycle, it will reduce the Ex Period for all corporate actions to a period of two business days. It seems likely that if both ASX and NZX move to T+2, there will be alignment between the Ex Period for dual listed securities.
Q16: What impact do you foresee for you, and the wider market, from having a two business day ex period aligned with the T+2 settlement cycle?

Rule changes to give effect to the proposals

Settlement cycle
The obligation to settle a trade within three business days is set out in the Participant Rules.

The parties to a trade (other than a crossing) are deemed to have contracted to settle that trade on the third business day after the day on which the trade was executed or reported via the trading system (refer to rule 10.22.1 in respect of securities quoted on the NZX Main Board, Debt Market and Alternative Market, rule 22.10.1 in respect of FSM shares and rule 23.5.1 in respect of securities quoted on the NXT Market).

In order to implement a T+2 settlement cycle, NZX will amend the Participant Rules referred to above, so that the parties to a trade are deemed to have contracted to settle a trade on the second business day after the day on which the trade was executed or reported via the trading system.

The Participant Rules also permit parties to an off-market trade to agree to settle the off-market trade on the first or second business day after the day on which the off-market trade was reported via the trading system. NZX is not proposing any changes to this as a result of moving to a T+2 settlement cycle.

Ex Period
As explained above in the corporate actions section, NZX proposes to reduce the Ex Period for corporate actions by one business day to align it with the reduced settlement cycle.

This will require the following minor rule changes to the NZX Main Board/Debt Market Listing Rules, NZAX Listing Rules, FSM Rules, NXT Market Rules (together, the “NZX listing rules”) and the Participant Rules:

- Ex Date is defined in the NZX listing rules to mean, in relation to a benefit, the second business day before the record date for that benefit. NZX will amend the definition of Ex Date to mean the first business day before the record date for that benefit.

- The appendices to the NZX listing rules titled ‘Timing of Events Affecting Securities’ set out the timing requirements for various corporate actions. NZX will amend the Ex Date section of these appendices so that they refer to rights commencing quotation on the first business day before the record date, instead of the second business day before the record date.

- NZX Participant Rule 13.9.1 states that where NZX is notified of a record date in relation to a corporate action, NZX will quote the relevant security on an ex basis on the business day which is two business days before the record date. NZX will amend rule 13.9.1 to refer to NZX quoting a security on an ex basis on the business day which is the first business day before the record date.

As the NZX listing rules and the Participant Rules form part of NZX’s Market Rules, the changes set out above will need to be approved by the Financial Markets Authority.

System changes to be implemented by NZX
To effect the proposed move to T+2, NZX would be required to undertake some minor configuration changes to the trading system. These changes are relatively straightforward to implement and NZX does not foresee any issues.
An initial review has indicated that there will need to be some minor changes to the NZCDC Settlement System, BaNCS. A change will need to be made to the parameters within BaNCS so that T+2 would be the entry in Settlement Rule field that appears on a number of BaNCS screens. Further, when equity options are exercised, a T+3 trade is automatically created in BaNCS. NZX will need to make a change to the system so that instead a T+2 trade is created. These changes are relatively straightforward to implement and NZX does not foresee any issues.

**Coordination with Australia**

The Boards of ASX Clear and ASX Settlement have formally accepted a recommendation from the Forum, an industry stakeholder group established under the Code of Practice for Equity Clearing and Settlement in Australia, that implementation of a T+2 settlement cycle for cash equities be targeted for early first calendar quarter 2016, and that the batch settlement cut-off time be moved to no later than 12.00pm, with the precise timing subject to further consultation.

The ASX will conclude consultation on the batch settlement cut off in November and is due to make a final recommendation that the batch settlement cut-off time be moved by 1 hour, from 10.30am to 11.30am. Upon endorsement of the recommended position, ASX will notify Market Participants of the final batch settlement cut-off time under a T+2 regime.

The ASX will also confirm the establishment of a broad based Market Implementation Group working towards full industry readiness for implementation of T+2 in the first calendar quarter of 2016.

NZX has received indications from Participants that a later settlement batch for ASX may affect the ability for participants to move securities between Australia and New Zealand in a timely manner. At this stage, NZX does not propose to alter its batch settlement times.

NZX proposes to align the transition with ASX and will engage with ASX regarding coordination of implementation.

**Q17: What, if any, additional considerations should NZX be aware of when coordinating with Australia?**

**Transition period**

NZX will need to put in place processes to deal with a cross-over period for a change from T+3 to T+2. Specifically, should T+3 end one trading day and T+2 start the following trading day there will be a three day period where some trades outstanding will be required to be settled in three days and some trades outstanding will be required to be settled in two days. This will result in one settlement day where the last day of trades undertaken under T+3 and the first day of trades undertaken under T+2 will all be required to be settled on the same day (which will mean that two days worth of trading will be required to be settled on one day).

Should the decision be made to move to T+2, NZX will provide further details of what steps will be taken to manage this as part of the implementation process.

**Q18: What issues do you foresee for your firm, or the wider market, in respect of the period of transition from T+3 to T+2?**

**Timetable**

The table below sets out the proposed timetable for the consultation and possible implementation:
Q19: **What, if any, additional considerations should NZX be aware of when setting the timetable for implementation?**

**Submissions**

Further to the specific questions six to 19 set out above, NZX invites comment on the impacts of a move to T+2 settlement discussed above and whether there are any areas where there will be additional impacts for market participants.

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<th>Action</th>
<th>Anticipated Date</th>
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<tbody>
<tr>
<td>Consultation closes</td>
<td>5.00pm 22 December 2014</td>
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<tr>
<td>Update on plans for implementation</td>
<td>Quarter 1 2015</td>
</tr>
<tr>
<td>Proposed implementation</td>
<td>Quarter 1 2016</td>
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