

# CHES Replacement: Confirmed changes to netting and settlement workflow

**Response to consultation feedback**

June 2021



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## Executive summary

### Overview

ASX's clearing and settlement facilities must be sufficiently resilient to withstand an array of stress events. During the CHES replacement project, new record trading volumes in March 2020 led ASX to propose changes to the design of both the netting and settlement workflows to put in place business processes that are not constrained by volumes.

On 18 February 2021, ASX released a consultation paper on the proposed netting and settlement workflow changes. The paper posed four key questions for ASX to assess the impact of the changes on clearing and settlement participants and settlement-only participants (herein referred to as 'participants', unless otherwise specified), software providers (third party vendors and those developing in-house) and approved market operators (AMOs).

ASX received submissions from 30 organisations during the formal consultation process and also convened a number of stakeholder forums to elicit further feedback during March to May, including focus group sessions, a Technical Committee meeting and a number of bilateral meetings with interested stakeholders on changes being proposed to respond to the feedback received. ASX thanks all of the organisations that have participated in the consultation and appreciates the constructive nature of that engagement.

Key themes from the feedback received through the consultation included:

- broad agreement that post trade processing should not constrain trading activity and that any changes to the system required to provide for additional system scalability should be made prior to 'Day 1' go-live
- strong support for expanding netting to all novated trades to improve efficiency and lower costs
- some concerns expressed about perceived increases in operational risk, predominantly related to reconciliation
- an increase in delivery risk given the scope and timing of the proposed change at this stage in the project lifecycle.

Following the consultation process, ASX confirms that it will implement changes to netting and settlement workflows, including discontinuing the materialisation of the net broker obligation (NBO) and the sending of individual settlement confirmation messages for instructions that settle successfully. In response to the feedback received, ASX has made some important modifications to the solution design for these changes. This includes changes to ISO messaging and the provision of additional information and reporting to assist participants with their exception management processes to address operational risk concerns.

While the timing for implementing the changes to the netting and settlement workflows may pose some challenge at this stage in the project, ASX considers that making these changes now is right for both ASX in operating resilient clearing and settlement facilities, and for the market. This is on the basis that:

- The new solution design avoids any need to introduce further change after go-live of the replacement system to cater for capacity related enhancements. It is more cost effective to make the changes now while development and testing activities are still in progress rather than making the changes after go-live. There is broad agreement from industry that making these changes following the go-live of the replacement system would be a sub-optimal outcome
- The solution reduces the risk of a capacity-related event post go-live or for interim constraints on trading activity being imposed similar to what was put in place by ASIC in March 2020<sup>1</sup>. The consultation process confirmed that there is no appetite from the market, AMOs and front offices for a capacity-related event or constraints on trading activity being imposed post go-live
- The solution allows ASX to build market infrastructure for the future that meets the high reliability, stability and resiliency standards expected by stakeholders and required under the Financial Stability Standards<sup>2</sup>. These changes will provide for system scalability and help ensure that the replacement system has the appropriate capacity and headroom consistent with ASX's regulatory obligations.

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<sup>1</sup> See [ASIC Media Release 20-062MR](#), 16 March 2020, ASIC takes steps to ensure equity market resiliency.

<sup>2</sup> See [ASIC-RBA joint media release](#), 1 October 2020, ASIC and RBA announce expectations for CHES replacement.

This paper summarises the feedback received through consultation and ASX's consideration of, and response to, that feedback, including the need for a solution that responds to stakeholder feedback without compromising the underlying objective of scalability. This included considering the need for a multiple uptick in capacity and the change to netting and settlement workflows that limited the ability to scale horizontally, with the potential project delivery risk the changes could introduce to CHES users. The paper also outlines the confirmed solution design.

ASX Settlement will continue to operate a Bank for International Standards (BIS) DvP Model 3 settlement model, with the benefits and efficiency of netting remaining. There is no impact to clearing risk management, specifically to margining or default management.

The functional code for netting and settlement, as well as the accelerated delivery of new features for corporate actions (DRP/BSP elections), is now targeted for delivery into the customer development environment (CDE) in August 2021, completing the external functional build for go-live. The revised functional specification and messaging requirements were published on 30 June 2021.

Finally, the CHES replacement application deployment into production in April 2023 remains unchanged.

## Background

In ASX's [response to consultation feedback](#) on a revised implementation timetable, published on 28 October 2020, ASX advised that it would consult with all impacted CHES users, including software providers, in early 2021 on refining the netting and settlement workflows. On 18 February 2021, ASX released its [consultation paper](#) on proposed changes to netting and settlement workflow for the CHES replacement system.

The key objective of the proposed changes is to allow the replacement system to provide for significant additional capacity on Day 1 implementation and avoid any post-trade processing constraints on trading activity and a subsequent capacity-related change after go-live.

The proposed changes redesigned the netting and settlement workflows that are currently linear in nature, i.e. business processes where higher volumes take more time to process regardless of how much hardware is applied. The unprecedented increase in volumes in March 2020 required ASX to reconsider not only the non-functional requirements, but also the netting and settlement business processes to ensure they are scalable and for the solution design to hold for the future.

The proposed changes set out in ASX's consultation paper did not change the fundamental tenets of clearing and settlement, rather ASX proposed some changes to the ways in which certain business processes were conducted.

The consultation sought feedback from impacted stakeholders on the proposed changes with the following four questions:

1. For impacted participants, what impacts do the proposed changes have on your overall business processes, operations and systems (e.g. cessation of NBO, introduction of NNDP, and/or the settlement confirmation changes)?
2. For impacted participants and software providers (third party vendors and those developing in-house), can the proposed solution design be enhanced or supplemented to assist with the implications of the proposed changes for existing business processes, operations and systems?
3. For impacted participants and software providers, what impacts do the proposed changes have on your organisation's technical readiness activities for accreditation commencing from late April 2022 and/or operational readiness activities commencing from September 2022?
4. For AMOs, do you see benefit in allowing for trade cancellation after trade date for trades executed on your market?

## Summary of key themes from the consultation process

Key themes from the feedback provided included:

- No appetite from the market, AMOs and front offices for a capacity-related event after go-live or for interim constraints on trading activity being imposed. This is non-negotiable, post the issues experienced when trade counts more than doubled in March 2020
- Expanding netting to include all novated trades was seen as a positive change to improve efficiency and lower cost
- A lack of support for trade cancellation after trade date
- ASX should give consideration to revising aspects of the design, to reduce delivery risk and perceived operational risks, predominantly related to reconciliation
- Many were seeking further information to understand the full impact including how key project milestones will be met
- A number of respondents felt that investigating reconciliation issues will be more challenging, and requested additional reporting to assist and expedite investigations
- NBOs should be finalised the day prior to settlement to give participants certainty of net obligations against the clearing house
- The way many back office systems are architected means they rely on receiving NBO information to close-out gross market trades
- Some respondents asked for an independent risk review of the proposed changes.

### Summary of ASX's response

In response to consultation feedback, which included a number of bilateral engagements to test the proposed modifications, ASX has made some changes to the original solution design exposed for consultation.

To address stakeholder feedback, the following changes are being made to the solution:

- A new obligation status report will be introduced that participants can request for a breakdown of the reported Novated Net Delivery Position (NNDP) for a specific settlement date, account (HIN), security and movement type
- The net settlement movement message has been enriched to include unit and fund settlement amounts per instruction type and counts
- Trade cancellations post-trade date will not be supported
- The novated settlement failure (NSF) and novated rescheduled instruction (NRI) method will now be used when a security is not eligible for settlement, thereby simplifying the solution design by having a single method of rescheduling novated gross market trades
- Support will be provided during the user testing period in ITE2 where CHES users will be able to become familiar with the process to build out their own internal procedures and controls, in addition to business-as-usual after go-live, to ensure any reconciliation breaks encountered can be expeditiously resolved by participants.

### Key project milestones

To accommodate the changes to the netting and settlement workflows, ASX has conducted a detailed review of all project activities and milestones, and has modified the implementation timetable as follows:

- Publish the revised functional specifications and messaging requirements at end June 2021
- Deliver the netting and settlement functionality in CDE 10 at end August 2021, instead of end June 2021
- Combine CDE 11, targeted for end September 2021, with CDE 10 to complete the functional build for Day 1 go-live by bringing forward the functional code for DRP and BSP elections and enquiry with CDE 10
- Consultation on the tranche 3 rule amendments, as well as on a consolidated rules package across all three tranches of rule amendments, will now commence in late August 2021, rather than early August 2021.

No other key project milestones are impacted by this change. ASX still plans to open ITE1 at the end of November 2021 and commence technical accreditation activities from end April 2022.

## 1. Overview of confirmed solution design

This section outlines the confirmed solution design, including the revisions ASX has made in response to stakeholder feedback.

### 1.1. Trade registration

There is no change to trade registration. As outlined in the February 2021 consultation paper, the CHES replacement system will continue to generate a trade registration confirmation to the clearing participant, as per the current process.

### 1.2. Netting and generated net broker obligation

As outlined in the February 2021 consultation paper, all novated trades are now eligible for netting without exception, therefore the existing netting eligibility criteria will be removed.

Gross market trades will no longer be offset and represented for settlement through the NBO. As a result of no longer generating the NBO, associated scheduled NBO and netted trade reporting will no longer be produced and disseminated to clearing participants in the overnight batch.

A new report, the netted obligation report, will be provided to clearing and settlement participants which sets out an end of day view of the NNDP per settlement account (HIN), security and BOM for each future settlement date. This new report will be created and disseminated during CHES end-of-day processing, after any applicable corporate action adjustments.

On trade date + 1, additional trades may be reported late, with an 'as at' date such as an options exercise, and will generate trade registration confirmations. In the trade date + 1 overnight process, a netted obligation report will again be generated and provided to clearing and settlement participants. The late trades reported on trade date + 1 will be netted into the previous NNDP for the appropriate settlement date. This will allow participants to reconcile the sum of the trade registration confirmations against the most recent NNDP which will be used in batch settlement.

As a result of consultation feedback in the case of a reconciliation issue, ASX will also now make available a new report, an obligation status report, allowing the constituent parts that make up the NNDP to be interrogated. This new report:

- Can be requested ad-hoc pre and post settlement
- Provides the breakdown of the reported NNDP for a specific settlement date, account (HIN), security, BOM and movement type (when requested for novated gross market trades)
- Allows for a participant to investigate any reconciliation breaks they may have encountered when reconciling the AMO confirmation such as Signal B or FIX, CHES trade registration confirmation against the NNDP in the netted obligation report.

### 1.3. Un-netting

As outlined in the February 2021 consultation paper, as a consequence of not generating the NBO, 'un-netting' (which unwinds the NBO and reinstates the market trades) and associated reporting will no longer be a relevant business process.

### 1.4. Margin calculations

There is no change to margin calculations. As outlined in the February 2021 consultation paper, cash market margin will continue to be calculated and charged on the net novated position of the clearing participant with margin settlement advices to be generated and provided to participants during the overnight batch, as per the current process.

### 1.5. Trade cancellation

In response to consultation feedback, trade cancellation will only be supported on trade date (T) via an AMO. The current workflow that allows participant trade cancellations via EIS 129 will no longer be supported under the revised solution design, as all trade cancellations must be performed by the AMO on trade date.

There is no change in allowing participants to cancel instructions generated pursuant to the isolate counterparty functionality in respect of fails.

ASX will retain its operating rule powers to remove transactions or instructions in certain circumstances up until settlement, including to maintain the orderly operation and integrity of the clearing and settlement facilities. This is expected to only occur under very rare and exceptional circumstances e.g. where required to cancel a trade pursuant to a court order.

### 1.6. Batch settlement

As outlined in the February 2021 consultation paper, the CHESSE replacement system will provide settlement confirmations for settled instructions on a net basis. This means individual settlement confirmations for each fully settled instruction will no longer be generated and ASX will only provide individual notifications of any individual instructions that have settled in part, or failed in full. Scheduled settlement instructions will be confirmed as settled via a net holding movement confirmation.

The system will continue to provide two types of settlement confirmation messages each at a net level:

1. A single net funds movement message for total funds settled in batch per payment facility (sett\_137, to replace the EIS 170)
2. A net settlement movement confirmation message per account (HIN), security, and BOM (sett\_136, to replace the EIS 146) for instructions settled in batch.

As a result of consultation feedback, the net settlement movement confirmation message, sett\_136, will now be enhanced to include the settled funds amount per security, account (HIN) and BOM plus a breakdown by settlement instruction type as follows:

- Total number of units settled
- Total funds settled
- Count of instructions settled

Participants can use the enhanced net settlement movement confirmation message to reconcile the total of settled securities and the value of the net funds movement confirmation against scheduled instructions that successfully settled.

Settlement reporting will remain unchanged for full and partial failures relating to novated gross market trades and will generate an NSF and an NRI.

Settlement reporting will remain unchanged for full failures relating to unilateral or bilateral scheduled instructions. The whole instruction will be rescheduled to the next batch settlement.

Settlement reporting will be revised for partial failures relating to unilateral or bilateral scheduled instructions and NRIs (including full failures where there is a standard settlement price (SSP) adjustment) from previous settlement days. In these circumstances, two messages will be generated:

1. A message called the 'adjusted settlement instruction', which provides information on the portion of the instruction that failed and is being rescheduled
2. A message called the 'settlement transaction generation notification', which provides information on the portion of the instruction that did settle

To assist settlement participants with their exception management processes, they will be able to request a demand report, the obligation status report. The report provides the requestor with a list of all settled instructions corresponding to the account (HIN), security and settlement date combination requested by the participant. This report is intended to assist in the reconciliation of breaks or for investigative purposes.

The following processes remain unaffected under the confirmed solution design:

- settlement funds processing

- client trust payment notifications
- settlement cut-off
- back-out algorithm relating to a unit fail or funds fail
- standard settlement price
- isolate counterparty<sup>3</sup>
- default management.

### **1.7. Cancellation of batch settlement**

As outlined in the February 2021 consultation paper, on the very rare occasion that the settlement process is cancelled or fails to complete, all non-novated obligations (non-novated gross market trades, unilateral and bilateral scheduled settlement instructions) and NRIs from previous settlement days will be rescheduled to the next business date (in full). The CHES replacement system will communicate this via a settlement instruction generation notification (sett\_130).

For novated gross market trades, which are captured in the calculated NNDP, an NSF will be created to replace the instructions which cannot be settled and a corresponding NRI will be scheduled for settlement for the next business date.

### **1.8. Corporate actions**

As outlined in the February 2021 consultation paper, the system will generate an adjusted settlement instruction (sett\_139) message for each settlement instruction including gross market trades to the participant for securities subject to corporate action events. The message itself and other value adjustments and accruals resulting from corporate actions on failed obligations remain unchanged.

### **1.9. mFund settlement**

There is no change to mFund settlement. As outlined in the February 2021 consultation paper, mFund orders will continue to settle in batch as per existing functionality.

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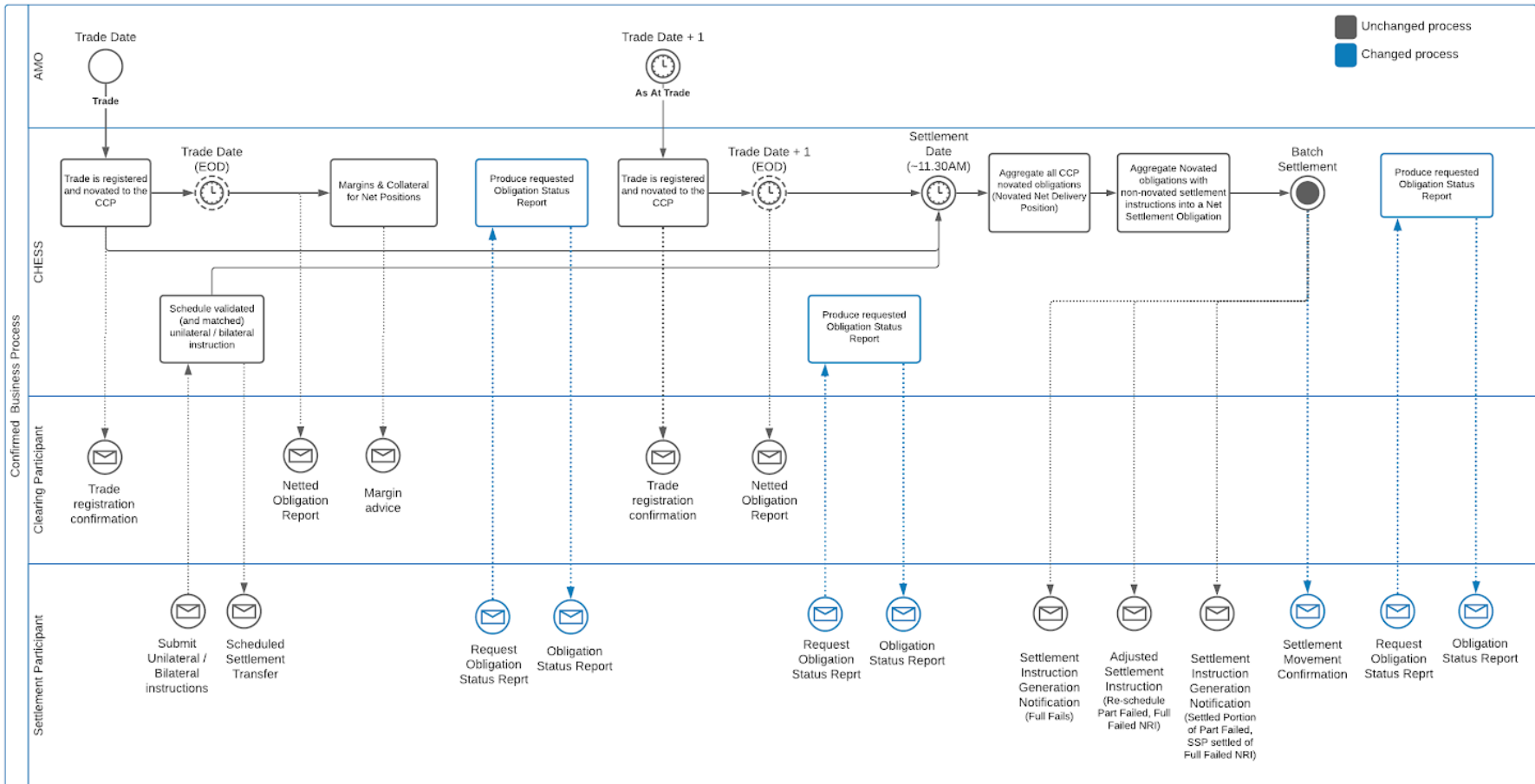
<sup>3</sup> The scope of the isolate counterparty function will be extended to a wider range of corporate action accruals.





### 1.10. High level: confirmed business process

The following diagram provides an updated high level overview of the confirmed solution for the key clearing and settlement workflows from trade registration through to batch settlement. Changes made to the proposed business process, as outlined above, have been annotated in blue to clearly delineate modifications made to the solution taking into account consultation feedback.



## 2. Feedback received from the consultation process

The following section provides a summary of the feedback received in the consultation process together with ASX's response to that feedback.

### 2.1. Post trade processing should not constrain trading activity

#### Feedback received

There was broad acceptance that post trade processing should not constrain trading activity.

#### ASX's response to feedback

In March 2020, record trading volumes in Australian equity markets were observed, which put a strain on operational processing capabilities across both ASX and market participants. This resulted in ASIC taking steps to ensure stability and resiliency across the industry by requiring a number of large equity market participants to limit the number of trades executed each day for a period of time<sup>4</sup>.

ASX has since prioritised a number of short and medium term upgrades to CHES but more structural changes to systems and processes would be required to remove the linear processes impacting the capacity and performance of ASX post trade processing systems.

ASX agrees with the feedback and has redesigned non-scalable business workflows by removing linear processes, as set out in section 1, thereby ensuring the CHES replacement system never causes constraints on trading activity.

### 2.2. Netting eligibility

#### Feedback received

Expanded netting of all novated trades is a positive change for netting efficiency. The inclusion of all market trades in the novation process is also expected to provide a benefit to participants who intend on performing internal daily validations that replicate the netting process.

#### ASX's response to feedback

Given the industry support, including the simplification for participants who choose to replicate the original ASX netting process, the existing netting eligibility criteria will be removed and all novated trades will be eligible for netting.

### 2.3. Investigation of reconciliation issues will be more difficult

#### Feedback received

There were requests for additional reporting to be made available to assist with reconciliations in the event there are discrepancies or breaks for participants reconciling gross market trades with the NNDP report.

#### ASX's response to feedback

ASX has made modifications to the solution in providing additional information via enriched messaging as well as with a new report, to assist with reconciling any potential discrepancies or breaks between novated gross market trades against the netted obligation (NNDP) report.

The system generates a net settlement movement (sett\_136) for each account (HIN), security and BOM combination where there are one or more "settled" obligations on the subject settlement date.

Today, in current production, the equivalent EIS message, EIS 146, only provides settlement movement for units. In the CHES replacement system, the net settlement movement confirmation message, sett\_136, will be enhanced to provide a greater breakdown of information by incorporating the funds associated to the settlement obligations contributing to the net settlement movement. Additionally, in response to consultation feedback, a breakdown of settlement obligations

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<sup>4</sup> See [ASIC Media Release 20-062MR](#), 16 March 2020, ASIC takes steps to ensure equity market resiliency.

contributing to the overall net movement will now include units, fund settlement amounts, and counts for each of the following instruction types (regardless of payment type):

- Novated gross market trades (which make up the NNDP)
- NSFs (representing the failure on a portion of the NNDP)
- BSSI
- USSI
- NRIs, including SSP adjustments
- Non-novated gross market trades

In addition, to further assist participants, ASX will now make available a new report, obligation status report, that participants can request which provides a list of settlement instructions per account (HIN), security, settlement date and BOM. As outlined in section 1.6, the obligation status report provides the underlying settlement instructions for the requested parameters to assist participants with their investigation of any potential discrepancies or breaks when reconciling the scheduled or settled settlement instructions from the netted obligation report or net settlement movement confirmation message.

#### **2.4. Cost implications of making a change at this time**

##### **Feedback received**

A number of respondents commented that software providers and CHES users developing in-house systems will need to re-design, re-write and re-test changes for the netting and settlement functionally already developed and tested in CDE, leading to additional costs to refactor code already developed.

##### **ASX's response to feedback**

While ASX recognises that changing system configurations to accommodate the revised workflows for netting and settlement is not ideal at this stage in the project lifecycle, it is necessary to support the enhanced Day 1 scalability that is now required.

Although making a change does lead to increased costs for software providers, including any in-house development, this feedback is acknowledged but is balanced against making a change after go-live as the alternative scenario would incur greater costs and risk for participants.

To ensure the replacement system does not constrain front office activity and to provide adequate resilience and capacity for many years to come, while balancing increased costs in the short term versus longer term, ASX considers that making the changes now is the lower cost option.

#### **2.5. Increased delivery risk for the market**

##### **Feedback received**

A delay in the publication of the final functional specifications and requirements for new and amended messages may not provide sufficient time for software vendors to implement and adequately test changes in a timely manner for the opening of ITE1 in late November 2021 and/or technical accreditation activities commencing from the end of April 2022. Participants will also need to invest additional time and resources in changing some operational processes. Collectively, this increases delivery risk for the market being ready for go-live in April 2023.

Some respondents were confident that they could still meet committed dates for key project milestones, while others were waiting until further information was made available before they could confirm.

##### **ASX's response to feedback**

ASX acknowledges this feedback and accepts these changes increase the delivery risk to the market.

To help mitigate this risk, the delivery of all functional code has been brought forward to end August 2021, instead of end September 2021, and will combine the functional payload for CDE 10 and CDE 11 into one final code drop, CDE 10, at the end of August.

ASX will also work on a bilateral basis with any stakeholder who is unable to meet key project milestones to help resolve any barriers to meeting the timeline as a result of these changes.

## 2.6. Increased operational risk for the market

### Feedback received

A number of respondents believe the proposed changes have a number of operational impacts and add a degree of complexity to well established business processes, predominantly related to investigating a potential reconciliation break.

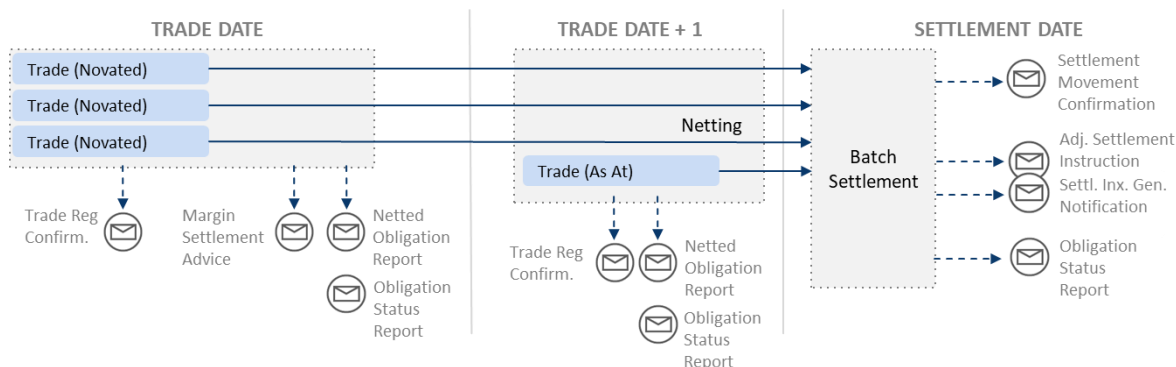
### ASX response to feedback

ASX, having identified areas to address this concern within the original design, has made changes to the confirmed solution design. As such, ASX does not believe the confirmed solution design increases operational risk for participants.

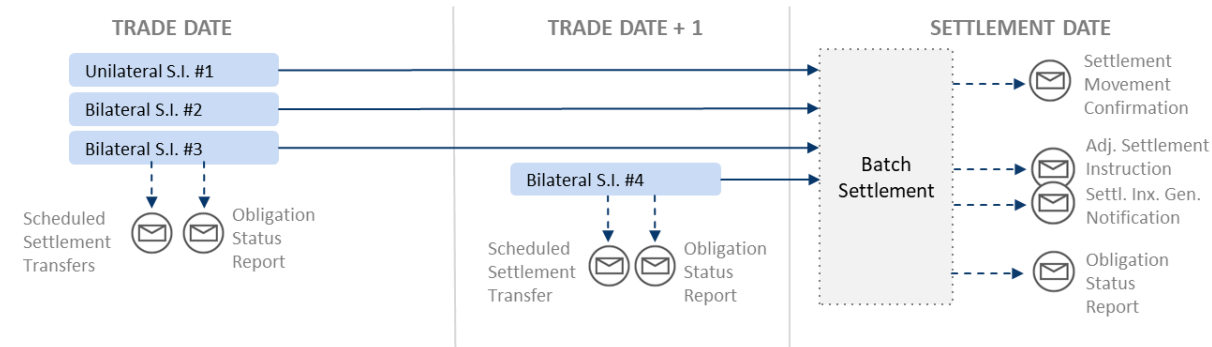
As outlined in sections 1.2 and 1.6, for assisting with possible reconciliation issues, ASX will make available (i) a new report that participants can request which provides details of each settlement instruction which is scheduled or settled as per the participant's request ( i.e. per account (HIN), security, settlement date and movement type); (ii) the net settlement movement message has been enriched to include unit and fund settlement amounts per instruction type and instruction type counts; and (iii) trade cancellations post trade date will not be supported.

The following two worked examples highlight how operational risk does not increase with the confirmed solution design. The examples demonstrate an end-to-end reconciliation for operational risk management for both market trades and for unilateral and bilateral settlement instructions.

### End-to-end reconciliation for operational risk management – market trades



### End-to-end reconciliation for operational risk management – unilateral and bilateral settlements instructions



All information required for end-to-end reconciliation and management of operational risk is available:

- Each trade registered in the CHES replacement system generates a trade registration confirmation message, which can be reconciled to the AMO confirmation, such as FIX or Signal B
- The NNDP provides a netted quantity, value calculation and count of novated gross market trades. This net obligation view is reported at T and T+1, taking into account any additional trades registered on T+1 (e.g. 'as at' trades due to options exercise). The NNDP can be reconciled to trade registration confirmation messages
- In the event of a reconciliation break with the NNDP reported, participants can request the obligation status report, to identify all novated gross market trades for a settlement entropot account (HIN), security and settlement date combination
- Full and/or partial failure of USSIs, BSSIs and NRIs from previous settlement batches is communicated via the adjustment settlement instruction and settlement instruction generation notification messages, per failed instruction
- Reconciliation of settlement for market trades is achieved by:
  - The net of all fully settled market trades reported via the enhanced settlement movement confirmation
  - Failures of market trades, viewed as a single NNDP position, are re-scheduled on a net basis via the NSF / NRI paradigm (as per current CDE)
- In the event of reconciliation breaks against the settlement movement confirmation, participants can request the obligation status report to identify all obligations (or a specific obligation type) for an account (HIN), security and settlement date combination.

## 2.7. NBO no longer materialised

### Feedback received

Many back office systems, and the way they are currently architected, rely on receiving NBO and netted trade information from CHES to close out novated gross market trades.

### ASX's response to feedback

The NNDP provides an equivalent level of detail as the NBO – the net total of gross trades – noting the NNDP is not a settlement instruction, carrying a transaction identifier. It is up to each software provider to determine the best way for their back office system to represent the new model and when to choose to complete their contra offset of gross trades versus the NNDP projection from the netted obligation report.

It should also be noted that post settlement, gross trades are settled unless reported otherwise. There are also no exceptions with trades that are registered late being excluded from the netting calculation. This is a benefit from a consistency perspective since the NNDP is a dynamic calculation on the net position for all eligible trades.

## 2.8. NNDP finality on S-1

### Feedback received

The netted obligation report (NNDP) should be finalised the day prior to settlement, S-1, allowing for gross market trade cancellations and 'as at' trades up to S-1 only.

### ASX's response to feedback

In response to consultation feedback, the NNDP position will be locked down on the morning of settlement, aligning the NNDP disseminated during end-of-day on T+1 (as adjusted) with the commencement of the settlement day. This allows participants sufficient time to process any potential rebooking and matching instructions. An exception to this is where ASX exercises an operating rule power to remove transactions or instructions in certain circumstances on the day of settlement, including to maintain the orderly operation and integrity of the clearing and settlement facilities. This is

expected to only occur under very rare and exceptional circumstances e.g. where required to cancel a trade pursuant to a court order.

Further details on the business events and associated messages that impact the NNDP calculation on the morning of settlement are published in the technical documentation portal.

## **2.9. Settlement status updates**

### **Feedback received**

As part of the redesign, it would be helpful for a start of settlement batch processing notification to be sent as soon as possible after settlement batch processing has begun, so that participants have an explicit understanding of when the settlement batch has commenced.

### **ASX's response to feedback**

Participants are only notified if there is a delay to the 11:30am commencement of batch settlement. If no notification is received, batch settlement will commence at the scheduled time. In the event the commencement of batch settlement is delayed, participants will be notified via a sett\_170 event notification message.

## **2.10. No benefit to trade cancellations after trade date**

### **Feedback received**

There was a lack of support for trade cancellations after trade date. Both participants and software vendors were concerned this would introduce an exception case that does not exist today, leading to scope change. Any trade cancellations permitted on the morning of settlement will affect a participant's settlement obligation, with limited time for operational teams to react and be ready for settlement.

### **ASX's response to feedback**

In response to consultation feedback, trade cancellation will only be supported on trade date (T). This can currently be done via an AMO, and will continue to be possible under the confirmed solution design on trade date. The current workflow that allows participant trade cancellations via EIS 129 will no longer be supported under the revised solution design, as all trade cancellations must be performed by the AMO on trade date.

There is no change in allowing participants to cancel instructions generated pursuant to the isolate counterparty functionality in respect of fails.

ASX will retain its operating rule powers to remove transactions or instructions in certain circumstances up until settlement, including to maintain the orderly operation and integrity of the clearing and settlement facilities. This is expected to only occur under very rare and exceptional circumstances e.g. where required to cancel a trade pursuant to a court order.

## **2.11. Independent risk assessment**

### **Feedback received**

Some respondents asked for an independent risk assessment to ensure any additional risks introduced by the proposed changes for both ASX and participants are fully understood and managed.

### **ASX's response to feedback**

There are a number of diverse users of CHES, and diverse mechanisms and back office systems that connect with CHES, many of which process information in bespoke ways. This makes an external risk assessment practically difficult, with trade-offs amongst CHES users. ASX does not consider that the confirmed solution design increases operational risk for participants, albeit it does introduce change to existing practices that will require new ways of designing workflows, but acknowledges the delivery risk associated with the changes, on a project of this scale and size. Accordingly ASX has undertaken a broad range of stakeholder engagement activities to listen, learn and respond to feedback on the solution



design. ASIC and the RBA, as co-regulators of licensed clearing and settlement facilities, continue to closely monitor ASX's compliance with its licence obligations. The regulators' supervision and engagement with ASX is focused on ASX's governance of the change program, its engagement with stakeholders, the functional and technical aspects of the replacement system, and its management of the risks associated with the migration to the new system.<sup>5</sup> In order to demonstrate its readiness to implement the new system, ASX will provide independent assurances to the regulators.

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<sup>5</sup> See [ASIC-RBA joint media release](#), 1 October 2020, ASIC and RBA announce expectations for CHES replacement.

### 3. Key project milestones

To accommodate the changes to the netting and settlement workflows, ASX has conducted a detailed review of all project activities and has modified some project milestones (see Appendix A).

#### 3.1. Technical documentation

To accommodate the changes ASX is making to the solution design, the revised functional specification and messaging requirements were published on 30 June 2021.

#### 3.2. Customer development environment

The revised functional code and messaging requirements will be made available in CDE at the end of August 2021, instead of end June 2021.

In addition, the functional code for DRP and BSP elections and enquiry, originally planned as part of CDE 11 for end September 2021, has been combined with CDE 10. This completes the full functional payload for Day 1 go-live, allowing software providers to complete their development.

#### 3.3. Operating rules

The redesign of the netting and settlement workflows will require further amendments to the ASX Clear and ASX Settlement operating rules, and the relevant changes will be incorporated as part of the tranche 3 rule amendments.

Consultation on the third tranche of operating rule amendments as well as a consolidated rules package across all the rule amendments for the new system will now commence in late August 2021, rather than early August 2021 as previously flagged. A 15 week consultation period will be provided, with the consultation process concluding in early December 2021. The rule amendments will also be the subject of further engagement with the regulatory agencies as part of the normal regulatory clearance process.

ASX will provide its response to consultation on the operating rule amendments in early June 2022, ahead of formal lodgement of the combined rules package with ASIC in early September 2022. Following completion of the regulatory clearance process, a final set of rule changes will be released. ASX plans to release the final rule changes in late September 2022, at least six months prior to go-live of the new system.

#### 3.4. Industry test environment

ASX still plans to open ITE1 at the end of November 2021 and commence technical accreditation activities from the end of April 2022. The opening of ITE2 and operational readiness activities are not impacted by the changes to the netting and settlement workflows.



#### 4. Stakeholder engagement activities

ASX hosted a number of activities to assist impacted stakeholders with reviewing the proposed changes, providing another opportunity for feedback outside of the formal consultation process.

This included three focus group sessions held over 2, 3 and 4 March 2021, as part of an iterative process for obtaining stakeholder feedback. The first session included software vendors, followed by separate sessions for clearing and settlement participants and settlement only participants. The three focus groups were attended by over 110 representatives from more than 50 organisations. The purpose of these sessions was to test the solution design and identify opportunities where design adjustments could be made to minimise the impact from a user or business perspective. The sessions were interactive and attendees had the opportunity to ask clarifying questions and provide any initial feedback.

An ISO 20022 Technical Committee meeting was held on 26 March 2021 by webinar, attended by over 40 representatives from more than 20 organisations. While the Committee had completed its work in April 2020, ASX considered it necessary to re-convene the Committee to discuss and seek any feedback on a number of proposed changes to ISO 20022 messages for the proposed netting and settlement workflow changes. ASX presented the key changes to ISO 20022 messages as a result of the re-design. Members were requested to provide feedback on the changed and new messages within two weeks after the meeting. Constructive comments and questions were raised by members during the meeting, demonstrating a level of familiarity with the proposed changes and a willingness to understand the changes in detail, including any knock on effects to related processing.

ASX also hosted implementation and transition working group webinars on 23 February 2021 and 3 June 2021 specifically addressing the proposed changes to netting and settlement workflows. The February meeting provided members with a recap on the background and key drivers, and walked members through the changes in detail, including providing an overview of the trade lifecycle for the proposed target state to help scene set with the big picture on the changes before stepping through each proposed change in more detail. This webinar also highlighted what is changing between current CHES, the code already delivered to CDE, and how the new system will operate under the proposed changes. The June meeting provided an overview of the confirmed solution design and the modifications ASX has made in response to feedback, an update on key project milestones, and worked examples of how participants can investigate a front-to-back reconciliation break under the revised solution.

ASX also had a number of bilateral engagements with key stakeholders and software providers to discuss their points of concern in advance of the 3 June 2021 webinar that confirmed the solution design. Key themes from the bilateral engagements included the need to be able to identify risk with reconciliation breaks promptly and mechanisms available to assist with any issues. ASX also met with industry associations which included providing additional detail on the governance process that underpinned the decision around the solution design.

