

JUNE 2024

Market operator obligations review

NZX Limited

Findings from the FMA's review of how well NZX is meeting its licensed market operator obligations, for the period 1 January to 31 December 2023



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Contents

Executive summary	3
About this report	3
How we approached this review	3
Overall assessment	4
Recommendations	4
NZX	5
Obligations	5
Governance arrangements	5
Growing and maturing the market	6
Risk management	7
Technology resilience and maturity	8
Follow up on recommendation from June 2023 report	9
NZX Regulation Limited (NZ RegCo)	10
Obligations	10
General operation and strategic framework	10
Conduct monitoring and consideration of applications	11
Appendix 1: Our role in reviewing NZX	14
Our role	14
Market operator obligations	14
NZX licensed markets	15
Our oversight of NZX	15
Appendix 2: Ratings explained	16

Executive summary

About this report

The Financial Markets Conduct Act 2013 (**FMC Act**) requires the Financial Markets Authority – Te Mana Tātai Hokohoko (**FMA**) to carry out a review and report on how well NZX is meeting its licensed market operator obligations. One of the key objectives of these reviews is to ensure that potential conflicts between regulatory and commercial functions of NZX, as a self-regulating organisation, are appropriately managed. The FMA may carry out this review at any time, but must do so at least once a year.

This report provides information on the review of NZX undertaken for the period from 1 January to 31 December 2023 (referred to as **the review period**).

How we approached this review

Each year we select the areas of focus for our review, with consideration given to our monitoring activities undertaken throughout the review period. During the year, we engaged regularly with NZX and NZX Regulation (NZ RegCo), the entity that performs NZX's regulatory functions, to assess their compliance with NZX's market operator obligations. Overall oversight included:

- review of quarterly NZX regulatory reporting and supplementary information provided
- review of NZ RegCo quarterly regulatory reporting, and sample testing of regulatory enquiries made by NZ RegCo
- consideration of proposed NZX rule changes in line with the FMC Act, along with engagement on changes to market guidance
- desk-based review of documentation provided by NZX and NZ RegCo in response to our requests
- on-site discussions with representatives of the NZX and NZ RegCo boards, NZX board committees, and key staff of NZX and NZ RegCo.
- The scope of our review was also influenced by:
- · events occurring and reporting received during the review period
- other areas noted in our previous review, for the year ended 31 December 2022 (referred to as the June 2023 report)
- any feedback provided to NZX or NZ RegCo during the review period.

We employ a risk-based approach to monitoring. While this is a review of NZX's overall compliance with its licensed market operator obligations, we have exercised judgement in selecting areas of focus, and the level and detail of work performed in each.

This report highlights our main findings and observations from the focused review and, as with any riskbased approach, has inherent limitations. Our assessment, recommendations, findings and observations are based on the information we have received, collected and reviewed.

Overall assessment

Our overall conclusion is that NZX complied with its licensed market operator obligations during the review period. Key highlights include:

- Governance arrangements continue to be appropriate and support NZX's ability to comply with its licensed market operator obligations.
- NZX and NZ RegCo continue to uplift frameworks, processes, and operational effectiveness across the areas assessed.
- Continued demonstration of NZ RegCo's operational independence, while maintaining an appropriate and effective working relationship with NZX.
- Significant work and investment in technology resources over the last 3 years has resulted in the business being much better positioned with respect to capability, resilience and security.
- Further enhancements in the risk management frameworks, ownership, identification, management and mitigation of risk, and delivery of assurance activity.
- Despite current economic headwinds there is a commitment to development of the markets and the core market operator operations, matched with appropriate funding and resourcing of staff and systems.

We acknowledge and thank NZX and NZ RegCo staff for their constructive engagements throughout 2023 and during our on-site review in 2024.

Recommendations

In addition to our overall observations above, we have the following recommendations:

Who	Area	Recommendation	Rating
NZX/NZ RegCo	Participant resilience	In undertaking internal uplift, NZX still has a dependency on participants' and providers' resilience for overall ecosystem stability. While NZX actively considers potential dependencies, weaknesses and impacts related to this, we recommend consideration of how these can be further addressed.	Medium
NZX	Crisis management	Although we have noted improvements in the approach to, and testing of, crisis management scenarios, we continue to recommend NZX considers a crisis simulation scenario that includes a system being unrecoverable. This would allow for better consideration of potential alternative solutions that may need to be put in place.	Medium

NZX

Obligations

NZX is responsible for ensuring it meets all of its obligations set out in the FMC Act. NZX outsources its regulatory functions (such as monitoring of its markets) to NZ RegCo, a subsidiary of NZX that has its own Board, management and staff. As such, our review is separated into different focus areas for NZX and NZ RegCo. In this part of the report we focus on the commercial aspects of NZX, including its strategy, infrastructure and overall performance in the context of the following market operator obligations:

- To the extent that is reasonably practicable, doing all things necessary to ensure that its licensed markets were fair, orderly, and transparent
- To have adequate arrangements to notify disclosures made to it under a disclosure obligation, and continuing to make those disclosures available
- To have adequate arrangements for handling conflicts between its commercial interests and the need to ensure its markets operate in a fair, orderly and transparent way
- To have sufficient resources (including financial, technological and human resources) to properly
 operate its licensed markets

Within the above general obligations, we had the following key areas of focus:

- Governance arrangements
- Growing and maturing the market
- Risk management
- Technology resilience and maturity

We also followed up on the recommendation made in the June 2023 report.

Governance arrangements

Background and review

The NZX board plays a critical role in developing and embedding organisational culture and good risk management practices, setting strategic direction, and providing oversight. The ultimate accountability for ensuring that the markets are operated in a compliant and effective manner rests with the board. As such, governance arrangements are frequently considered as part of our oversight.

During the review period, a new Chair was appointed to the board in May 2023 and a new director appointed in February 2023, and membership of board committees changed accordingly. The management committee structure was also changed, through consolidation of some previously established committees and creation of new committees for architectural governance and cyber security. There is work underway to review and tailor board and committee reporting to be more targeted, to further support effective oversight.

To assess how governance arrangements operate in practice, we considered the level of reporting to the board and engagement across senior management. We reviewed a range of information including board papers and minutes, regulatory reports and committee papers, and met with the Chair of the board, the CEO, the Chair of the Audit and Risk Committee, and members of the executive team.

FMA observations

Our view is that NZX governance arrangements are appropriate. In particular:

- While there were some changes to the board, the board maintained a wide range of expertise and experience across key areas of the business including governance, capital markets, financial reporting and technology.
- The board remains active and engaged. We observed clear evidence of board and management engagement, with regularly scheduled touchpoints between the board (or board committees) and key management personnel, and with NZ RegCo.
- The board is committed to ensuring it meets its obligations, including through regular reviews of conflict management arrangements and ensuring resourcing remains appropriate despite pressure on costs due to the prevailing economic conditions.
- The management committee structure targets key areas, and the composition of each committee includes an appropriate cross-section of management. The NZX Capital Markets Management Board undertakes regular assessment of the adequacy of resourcing, in particular the requirement to maintain sufficient financial, technological and human resources.

Growing and maturing the market

Background and review

NZX operates a diversified business in a complex market ecosystem, delivering a critical service to New Zealand. How NZX approaches growing and maturing its markets is a relevant consideration in the context of how it meets its market operator obligations as part of this journey, given that this can impact on the confidence level of businesses and investors participating in the market.

We have considered NZX's management of opportunities and risks, the regard it gives to market trends and market settings within its rules, and its management of potential conflicts.

During the review period there were a number of strategy and policy initiatives, including the introduction of NZX Dark, an unlit order book, and other amendments to the NZX Listing and NZX Participant Rules including changes to how issuers may raise capital. There were also developments undertaken in relation to other NZX businesses outside of the licensed exchange.

As part of our assessment, we considered board papers, strategic plans, trends, environment scanning and related registers, and regulatory reporting received. We also had discussions with key personnel in relation to the work being done to improve the growth and resilience of NZX as a market operator.

FMA observations

We consider NZX's commitment to the stability of the exchange and its management of market risks and opportunities are important to its effective functioning as a market operator. We observed that:

- NZX continues to actively consider how the market can be further developed by having a programme of work to provide better depth and liquidity on the markets.
- There is ongoing consideration of market rules to ensure they remain fit for purpose, taking into account international and market trends, and feedback received.
- Despite current economic headwinds there is a commitment to the core market operator operations through appropriate funding and resourcing of staff and systems.
- While NZX also continues to develop its other businesses, we do not consider this adversely impacts the resilience and growth of the licensed exchange.

Risk management

Background and review

A robust risk management framework continues to be a key foundation for NZX to meet its market operator obligations, in particular ensuring a fair, orderly and transparent market, and the requirement to have sufficient resources to properly operate its licensed markets.

We considered NZX's approach to risk management, the structure and operation of its central risk management function during the review period, and how risk management practices were further embedded in the organisation.

We took into account a variety of information, including organisational structure, board and board committee reporting and minutes, policy and process documents, risk assessments, processes and registers, assurance activities undertaken during the review period, and any external reviews. Additionally, we spoke with NZX's key risk management personnel, including the Chief Risk Officer, and the Chair of the Audit and Risk Committee.

Key enhancements made by NZX during the review period included:

- establishing the Chief Risk Officer (CRO) role on its executive team
- a refresh of NZX's risk appetite and risk tolerance levels
- further embedding of its risk management framework, and more proactive management and monitoring of risks
- further delivery of assurance reviews across NZX and NZ RegCo
- commissioning a review of its risk management to assess the framework and processes, which concluded there has been an uplift overall in status and maturity levels, and highlighted strengths and some areas for continued improvement.

FMA observations

Throughout the review period we received ongoing reporting, reviewed documentation, and held discussions leading to the following observations:

• The risk culture and frameworks continue to mature and support NZX's ability to meet its market operator obligations.

- The separation of CFO and CRO roles has helped to ensure that the risk function operates with enhanced separation from other functions, allowing for more independent challenge to ensure risks are managed effectively and at the appropriate level.
- The risk team maintains good engagement across NZX and NZ RegCo, and works with frontline teams to improve risk management practices.
- There is a clear plan of work to continue maturing risk management practices and systems across the organisation to achieve target maturity levels.

Technology resilience and maturity

Background and review

Our two most recent reviews found that NZX achieved a significant uplift in its technological resources since the market outage issues experienced in 2020, and continued to mature in this area to support compliance with its market operator obligations. In the June 2023 report, we reinforced the need to continue to concentrate on uplifting technological capability across the business by delivering further planned activities and maintaining a focus on the future of technology, risks and resilience.

During the review period, we received reporting from NZX regarding the performance of its systems, monitoring it undertakes, key initiatives, and work being done to continue to mature its governance arrangements around technology resources, as well as further enhancing resilience and security. We also spoke to the Chief Information Officer and other members of the executive team in the review period and during our on-site visit.

During the review period there were no material incidents or outages for the core systems relevant to the operation of the markets, and a number of initiatives were delivered to strengthen governance arrangements, further enhance security and modernise applications.

For our review, we focused on resilience and identification of risks and vulnerabilities, participants' resilience and progress towards adherence to connectivity standards, and continuous improvements.

FMA observations

The significant work and investment in technological resources over the last two years has resulted in the business being better positioned with respect to technology and cyber security. These are areas where there is significant inherent risk. We gained further comfort during the review period, through regular reporting, reviewing work underway and updates on further planned initiatives to continue to mature arrangements and capabilities. Our other observations include:

- There is a clear strategy and plan of work in place to refresh technology, ensuring all systems and infrastructure are well maintained to mitigate risks.
- Security profile has continued to improve through standardisation of NZX's operating environment, improvements to its threat management programme and further enhancement of detection and response ability.
- Establishment of a Cyber Security Forum, and a continuing programme of cybersecurity education and testing for staff.

- Improved monitoring and reporting of risks through further separation within the risk hierarchy, so that different risks can be more effectively identified, considered and mitigated.
- Employing good practices in relation to trend monitoring and intelligence sharing with other financial institutions to support an overall more resilient ecosystem.
- A prudent shift in the approach to technological upgrades, from larger less-frequent updates to more frequent incremental updates.
- In undertaking internal uplift, NZX still has a dependency on participants' and providers' resilience for overall ecosystem stability. While NZX actively considers potential dependencies, weaknesses and impacts related to this, we recommend consideration of how these can be further addressed to the extent possible.

Follow up on recommendation from June 2023 report

Background and review

Our June 2023 report provided a recommendation to NZX to continue to develop its crisis management framework to include crisis simulations where NZX's systems are unable to be recovered, and there is significant uncertainty as to the ability and timing of recovery.

As part of our follow up, we considered the work completed with respect to the Crisis Management Framework, protocols and processes, any assurance activities, and scenario simulations conducted in the review period to assess and improve preparedness to manage significant market events more generally. This included reviewing regular regulatory reporting received, internal reports relevant to the topic and select documentation (including policies and processes), and having discussions with NZX and NZ RegCo management.

FMA observations

Consistent with our observations in other areas, NZX has further progressed work to enhance its crisis management framework and approach.

The crisis simulation performed by NZX during the review period involved a software provider, that was critical to a majority of participants, going offline. This was a more complex scenario than in prior periods, and was run in partnership with external providers. The scenario involved a significant disruption to the service of the market and allowed for better testing across the exchange and participants as members of the same ecosystem, although it stopped short of involving an unrecoverable system or a situation in which there is uncertainty as to the ability and timing of recovery.

We continue to recommend that NZX consider undertaking a scenario test that includes a system being unrecoverable, as this would allow for better consideration of potential solutions that may need to be put in place. It would also provide participants the opportunity to test their own response and resilience to such events.

NZX Regulation Limited (NZ RegCo)

Obligations

NZX outsources its regulatory functions (such as monitoring of its markets) to NZ RegCo, a subsidiary of NZX that has a separate board, management and staff.

NZ RegCo is subject to a charter setting out its objectives, responsibilities, and overall operational framework.

In this part of the report, we focus on the following obligations of NZX as relevant to the NZ RegCo function:

- To the extent that is reasonably practicable, do all things necessary to ensure that its licensed markets were fair, orderly and transparent
- Have adequate arrangements for monitoring the conduct of participants on or in relation to the markets
- Have adequate arrangements for enforcing compliance with the relevant market rules
- Have sufficient resources (including financial, technological and human resources) to properly operate its licensed markets

Within the above general obligations, we had the following key areas of focus:

- NZ RegCo's general operation and strategic framework
- Conduct monitoring and consideration of applications made to NZ RegCo

General operation and strategic framework

Background and review

This was the third full year of operation for NZ RegCo. During the review period, the NZ RegCo board was made up of five directors, four of whom are independent and one who is a crossover director between NZX and NZ RegCo. The latest independent director was appointed on 1 May 2023. The composition of the senior leadership team remained overall stable.

As part of our review we considered:

- the level of independence demonstrated by the NZ RegCo board and management from NZX's commercial functions
- oversight provided by the NZ RegCo board
- general operation of the NZ RegCo structure.

We reviewed board papers and minutes, quarterly reporting received, key strategy documents, NZX's expectations of NZ RegCo, and performance against operational benchmarks. We liaised with NZX and NZ RegCo staff during the review period, and also met with the Chair of the NZ RegCo board and the CEO of NZ RegCo.

During the review period, NZ RegCo and the FMA agreed a memorandum of understanding and protocols covering key oversight and enforcement matters. Our engagements with NZ RegCo pursuant to these arrangements helped further inform scoping of areas and provided comfort in relation to NZ RegCo's performance and oversight of market conduct.

FMA observations

We consider the arrangements between NZX and NZ RegCo continue to effectively support NZX's compliance with its market operator obligations. The structural separation of NZ RegCo and creation of a separate governance structure have enabled an increased level of focus on the regulatory function strategy, and more robust governance arrangements.

From our discussions and review, we have the following observations:

- NZ RegCo operates in a structured and considered way with a clear strategy, objectives, and set of
 outcomes it seeks to achieve.
- There is a continued uplift in maturity generally, with a plan of work in place to support compliant markets.
- NZ RegCo directors and management continue to operate with a high degree of independence from NZX and an independent mindset. Engagements with, and requests from, NZX are undertaken openly and effectively.
- The NZ RegCo board demonstrates a high level of engagement, has a good cross-section of skills, and gives appropriate consideration to succession planning.
- Board papers are high quality, with discussions and outcomes clearly recorded.
- NZ RegCo demonstrates awareness of regulatory and market trends through environment scans and building on relationships with international peers.

Conduct monitoring and consideration of applications

Background and review

NZX must have adequate arrangements for monitoring the conduct of participants in its markets. NZX outsources this function to NZ RegCo, which undertakes such monitoring through a number of functions, including Surveillance, Participant Compliance, Issuer Regulation and Market Conduct. While we considered all areas and met with the leadership team of each function, we focused more on select areas within the Surveillance, Market Conduct and Issuer Regulation remits.

Surveillance

The Surveillance team provides frontline monitoring of the trading activity occurring on NZX's markets. The proper functioning of this team is essential to maintaining market integrity. This year we focused on the general operation of the surveillance function and enhancements made during the review period. We based our assessment on the quarterly metrics reports and logs, trends register, board papers covering relevant topics, the projects implemented, sample testing of files, and enquiries and discussions.

We are satisfied that the surveillance function is operating effectively. We observed that:

- The calibration of SMARTS¹ alerts, used to target additional market idiosyncrasies, has improved the quality of alerts being produced, including a reduction in the rate of false positives.
- There is an active approach to monitoring trends in New Zealand and overseas markets, including dialogue with surveillance teams in similar entities.
- Regulatory risks and market trends are taken into account when assessing existing arrangements and how they might be improved to better serve the market.

Market Conduct

The Market Conduct team is responsible for oversight, monitoring, investigation of potential breaches of the NZX Listing Rules by listed issuers, and enforcement activity in the issuer space. The team also supports other NZ RegCo teams where a case needs to be referred to the NZ Markets Disciplinary Tribunal (NZMDT). For this review, we focused on discrete areas of the team's functions, including Market Conduct's framework, processes for oversight and monitoring of listed issuers, monitoring activity undertaken during the review period, and approach to conducting investigations.

We considered the monitoring framework and process documents, oversight reporting, targeted reviews, quarterly reporting received, output of our sample testing of regulatory enquiries, and discussions with NZ RegCo's management and Chair, as well as the Chair and Executive Counsel of the NZMDT.

From our review and conversations with NZ RegCo management we observed:

- The Market Conduct team is continuing to enhance its approach to monitoring listed issuers, through further development of the issuer monitoring framework and the use of targeted reviews.
- There were notable enhancements made to the framework in relation to the consideration of annual and financial reports.
- A proactive approach was taken during the review period to ensure guidance was being provided to the market where the team was seeing repeated issues, including providing training opportunities where potential uplift was identified.
- There was an adjustment period following the introduction of revised penalty bands² to develop a better understanding of how they should be applied in particular circumstances and to recalibrate NZ RegCo's approach.

Issuer Regulation

Issuer Regulation administers the NZX Listing Rules and the Fonterra Shareholders' Market Listing Rules. Its activities include consideration of applications for new listings and bond designations. We selected the green bond designation process as an area of interest. For the purposes of our assessment, we considered the relevant NZX Listing Rules, process documents and practice notes, and undertook sample reviews.

We observed that:

² The structure of the penalties NZX can issue in response to market rule breaches

2024 Market Operator Obligations Review – NZX Limited

¹ The system used by NZX for market surveillance

- NZ RegCo has developed a process for considering whether or not a bond can be designated as 'green'. This process sets out the documents and steps required, although as a process document it is not clear on the assessment considerations that are used in the decision.
- The review of sample cases demonstrated adherence to the processes, and designations were deemed appropriate. However, underlying analysis leading to decisions was not clear from the documentation received.

The NZ RegCo work plan includes a targeted review of its framework and processes in relation to bond designations. We suggest that as part of this work, consideration is given to better capturing the factors and analysis relevant to the decision-making process.

Appendix 1: Our role in reviewing NZX

Our role

The FMA is an Independent Crown Entity and one of two main regulators of New Zealand's financial markets. Our purpose is to promote and facilitate the development of fair, efficient and transparent financial markets.

Under the FMC Act, we are required to review, at least annually, how well a licensed market operator is meeting its obligations. We are also required to publish a written report of the review.

If we consider, after carrying out a review, that a licensed market operator has failed or is failing to meet any one or more of its market operator obligations, we may, by written notice, require the licensed market operator to submit an action plan to the FMA.

Market operator obligations

In the FMC Act, 'market operator obligations' means:

- the general obligations in respect of licensed markets (section 314):
 - to ensure, to the extent that is reasonably practicable, that each of its licensed markets is a fair, orderly and transparent market
 - to have adequate arrangements for notifying disclosures made to it from participants in its markets, and for continuing to make those disclosures available
 - to have adequate arrangements for handling conflicts between its commercial interests and the need to ensure its markets operate in a fair, orderly and transparent manner
 - o to have adequate arrangements for monitoring the conduct of participants in its markets
 - o to have adequate arrangements for enforcing compliance with market rules
 - to have sufficient resources (including financial, technological and human resources) to operate its licensed markets properly
- an obligation to respond to a request from the FMA to make changes to market rules (section 333)
- an obligation to give the FMA an annual self-assessment of compliance with its obligations (section 337)
- an obligation to act on the directions of the FMA or the Minister, if the operator is found to be failing to meet any of its obligations (sections 340 to 342)
- any obligation imposed as a condition of a market operator's licence.

NZX licensed markets

NZX is licensed to operate the following markets in New Zealand:

- NZX Main Board
- NZX Debt Market
- Fonterra Shareholders' Market
- NZX Derivatives Market

Details of NZX's licence are on our website.

Our oversight of NZX

Our ongoing oversight of NZX in this review period included:

- engagements with NZX and NZ RegCo
- review of NZX regulatory reporting and supporting information
- reviews of NZ RegCo regulatory reporting and select matters
- discussions about market matters arising, as required
- consulting on NZX policies and proposed rule changes where appropriate.

For the purposes of this review, we also considered documents and information provided to us including:

- corporate structure and governance arrangements
- minutes of select board and committee meetings
- NZX's 'Market Assessment Report' setting out a self-assessment of its compliance with market operator obligations
- NZ RegCo's 'Oversight and Engagement Report'
- NZ Markets Disciplinary Tribunal's Annual Report 2023
- various policies and procedures
- various supporting documents.

Appendix 2: Ratings explained

The following rating scale has been used to demonstrate the significance of our recommendations:

Rating	Definition
Low	Minor process or control issue identified, however unlikely to have had a material impact on the overall effectiveness of the systems and the entity's ability to comply with its obligations.
Medium	Process or control issue, with the potential to have a moderate impact on the overall effectiveness of the systems and the entity's ability to comply with its obligations.
High	Process or control issue requiring immediate attention that did, or may have, a significant effect on the overall effectiveness of the systems and the entity's ability to comply with its obligations, given its significance or systemic nature.

Action plans to implement changes should be prioritised by the rating of each finding, with remediation of high-level findings requiring more immediate priority.