



ASIC
Australian Securities &
Investments Commission

REPORT 601

Market assessment report: Yieldbroker Pty Limited

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About this report

This report outlines the findings of our assessment of the market operated by Yieldbroker Pty Limited (Yieldbroker). It focuses on the market's arrangements for conflicts and governance, supervision and enforcement, and systems and controls.

This report makes several recommendations designed to improve Yieldbroker's arrangements in those three areas. A number of the findings and recommendations will be relevant to other specialised market operators regulated by ASIC.

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Consultation papers: seek feedback from stakeholders on matters ASIC is considering, such as proposed relief or proposed regulatory guidance.

Regulatory guides: give guidance to regulated entities by:

- explaining when and how ASIC will exercise specific powers under legislation (primarily the Corporations Act)
- explaining how ASIC interprets the law
- describing the principles underlying ASIC's approach
- giving practical guidance (e.g. describing the steps of a process such as applying for a licence or giving practical examples of how regulated entities may decide to meet their obligations).

Information sheets: provide concise guidance on a specific process or compliance issue or an overview of detailed guidance.

Reports: describe ASIC compliance or relief activity or the results of a research project.

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Examples in this report are purely for illustration; they are not exhaustive and are not intended to impose or imply particular rules or requirements.

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Executive summary

- 1 We conducted an assessment of Yieldbroker's compliance with specific obligations it has as a market operator licensed under the *Corporations Act 2001* (Corporations Act). Yieldbroker operates two electronic markets: the interdealer and the client-to-dealer markets. These markets offer trading in Australian and New Zealand debt securities and interest rate derivatives, including government securities. Yieldbroker also operates an auction platform that is used by the Australian Office of Financial Management, the Reserve Bank of Australia, the New Zealand Debt Management Office and other semi-government borrowers.
- 2 Section 794C of the Corporations Act empowers ASIC to assess how well a market licensee is complying with its obligations. The present assessment covers the period from 1 January 2017 to 30 June 2018 (assessment period). It focuses on Yieldbroker's obligations under s792A(c) to operate its markets adequately, with a particular focus on three areas: conflicts and governance, supervision and enforcement, and systems and controls.
- 3 We found that Yieldbroker met its obligations as a licensed market. However, we also found that its arrangements could be improved in each of the three areas we examined, and that these improvements would position it to continue to meet regulatory expectations in the future. Yieldbroker had already made substantial progress in some areas before our assessment began, particularly in the areas of corporate governance and cybersecurity.

Key findings and recommendations

- 4 Overall, we are satisfied that during the assessment period Yieldbroker had adequate arrangements for operating its markets in keeping with its obligations under s792A(c) of the Corporations Act. Our assessment focused on three areas: conflicts and governance, supervision and enforcement, and systems and controls.

Conflicts and governance

- 5 We assessed whether Yieldbroker's arrangements for handling conflicts were appropriate. We also assessed whether, in practice, Yieldbroker reliably and quickly identified actual or potential conflicts of interest and responded to them appropriately.
- 6 We found that while Yieldbroker's directors and senior staff generally identified and considered conflict-related issues when making decisions, its policies and procedures could be better tailored to the market's specific

circumstances. We also made recommendations regarding Yieldbroker's remuneration policy.

- 7 We reviewed Yieldbroker's corporate governance arrangements and found that these would benefit from a review and an update. During the assessment period, Yieldbroker had already commenced a comprehensive review of its corporate governance arrangements.

Supervision and enforcement

- 8 We assessed Yieldbroker's arrangements for supervising its markets and found them to be broadly adequate and effective. We also received favourable accounts from participants on the perceived integrity of the markets operated by Yieldbroker.
- 9 However, we made several recommendations to strengthen Yieldbroker's supervision procedures. For instance, in certain areas Yieldbroker's procedures need to be better documented and their implementation more robustly monitored.
- 10 We also made recommendations to Yieldbroker about the design and operation of some of the surveillance alerts, including some additional types of conduct that Yieldbroker should consider monitoring.

Systems and controls

- 11 We assessed Yieldbroker's systems and controls, focusing on the market's technology governance, approach to operational risk and cyber resilience posture. We found that Yieldbroker's arrangements were sufficient and adequate given the nature, size and complexity of the market. However, its technology governance could be improved by enhancing board reporting and engagement.
- 12 Yieldbroker undertook a significant program of work during the assessment period to improve its cyber resilience profile across all major areas of the [US National Institute of Standards and Technology Cybersecurity Framework](#) for critical infrastructure (NIST Cybersecurity Framework).

A The assessment

Key points

We may conduct an assessment of a market licensee, such as Yieldbroker, under s794C(1) of the Corporations Act.

In conducting our assessment, we may assess how well a market licensee is complying with its obligations under s792A(c), but we can also include other Ch 7 obligations.

We use the licensee's self-assessment reports, our observation of the licensee's performance (including review of trading records and surveillance alerts), market intelligence and other sources to form a view of how well the licensee has operated its market during the identified assessment period.

Scope

- 13 We assessed Yieldbroker's arrangements under s792A(c) and are satisfied that during the assessment period it had adequate arrangements for operating its markets, including:
- (a) handling conflicts between its commercial interests and its need to ensure that its markets are fair, orderly and transparent;
 - (b) monitoring the conduct of participants on or in relation to its markets; and
 - (c) enforcing compliance with its markets' operating rules.
- 14 On conflicts of interests, we included corporate governance arrangements in the scope of our assessment. On the monitoring and enforcing obligation, we looked at the whole surveillance cycle, from the scoping and design of Yieldbroker's alerts to the final stages of their escalation.
- 15 We also assessed Yieldbroker's compliance with its obligation under s792A(d) to have sufficient resources, specifically in relation to the systems and controls function and cyber resilience.

Methodology

Materials we reviewed

- 16 In conducting our assessment, we considered:
- (a) Yieldbroker's annual regulatory report for the period 1 July 2016 to 30 June 2017;

- (b) information obtained from and about Yieldbroker in the ordinary course of our dealings with it as a market licensee;
- (c) Yieldbroker's response to our notice dated 22 December 2017, under s30 of the *Australian Securities and Investments Commission Act 2001* to obtain information about how it was meeting certain obligations under the Corporations Act;
- (d) information we received during our visits to Yieldbroker's office during March and April 2018, where we conducted interviews with Yieldbroker's Chief Executive Officer, the Company Secretary and Head of Corporate, as well as members of Yieldbroker's operations, infrastructure and surveillance staff;
- (e) trading records and surveillance alerts; and
- (f) information we received during meetings with a cross-section of participants of the markets operated by Yieldbroker, including buy-side and sell-side participants.

B Conflicts and governance

Key points

Yieldbroker's ownership and participation structure may give rise to conflicts of interests—this should be reflected in its policies.

While we did not detect any mismanagement of conflicts, Yieldbroker needs to strengthen its conflicts of interest arrangements. This includes developing additional procedures.

Yieldbroker's corporate governance arrangements still reflect the traditional structure of a mutual market and would benefit from a review and an update. At the time of this assessment, Yieldbroker was undertaking a comprehensive review of its governance arrangements.

Conflicts of interest

- 17 We assessed Yieldbroker's arrangements for handling conflicts, and whether, under those arrangements, actual or potential conflicts of interest were reliably and quickly identified and appropriately responded to.

Conflicts handling requirement under the Corporations Act

- 18 Under s792A of the Corporations Act, a market licensee must have adequate arrangements for handling conflicts between its commercial interests and the need to:
- (a) ensure that the market operates in a fair, orderly and transparent way; and
 - (b) monitor and enforce compliance with the market's operating rules.
- 19 In addition, Pt 7.2 of the Corporations Act reflects in several sections the types of conflicts that arise when profit-oriented markets demutualise but retain regulatory powers. Conflicts may arise, for instance, when the operator lists or participates in its own market, or where it must regulate its competitors.
- 20 [Regulatory Guide 172](#) *Financial markets: Domestic and overseas operators* (RG 172) sets out our guidance on the obligations under s792A(c). It notes the expectation that, under the arrangements, 'actual or potential conflicts of interest are reliably and quickly identified and appropriately responded to, such as by taking actions to manage the conflict, avoid the conflict or disclose the conflict' (RG 172.121).

Yieldbroker structure and potential conflicts

- 21 Different specialised trading platforms present a diversity of ownership models, which include ownership by derivatives exchanges, interdealer brokers, dealer consortiums, information service companies and others. Each ownership structure gives rise to different potential conflicts of interest. It is important for market operators to understand the connection between their ownership model and the potential conflicts of interest they may be subject to. This connection should be reflected in the market's conflicts of interest arrangements.

Yieldbroker's structure: Semi-mutualised market with diversity of participants

- 22 Yieldbroker was born as a joint venture with ownership shared equally between major banking participants in the Australian and New Zealand interest rate markets. Over time, several other banks also joined as dealers without acquiring an ownership stake. In 2014, ASX Limited acquired a 49% share in the business.
- 23 The resulting ownership and participating structure of Yieldbroker could be described as a 'semi-mutualised market'. Several dealer-owners hold equal stakes and, as at the end of the 2017–18 financial year, one seat at the board. ASX Limited holds a participation of 49% and has additional board representation. Despite the large ownership stake held by ASX, Yieldbroker and ASX state that Yieldbroker is managed independently from ASX.

Note: See ASX and Yieldbroker's joint media release: [ASX completes investment in Yieldbroker](#) (PDF 45 KB), 28 November 2014.

- 24 The different combinations of participation and ownership at Yieldbroker create a diversity of stakeholders whose interest in the way Yieldbroker conducts its business may differ, giving rise to a particular set of potential conflicts of interest.

Owners that are participants

- 25 An operator may have an incentive to benefit participants that are owners of the market over others that are not. However, the operator also has a duty to ensure the market they operate is a fair market. This includes an obligation to not unfairly discriminate against a participant or type of participant in the market, including market infrastructure providers.
- 26 For instance, a venue owned by participants may be conflicted when making decisions under the rules. Owners that are participants may have an interest in taking disciplinary decisions that favour themselves and/or punish competitors. A participant-owned operator may also be conflicted in decisions about access to the market, such as the admission of participants or

on matters such as latency or priority that can provide certain participants with an unfair advantage.

- 27 The dealer-owned market may also be incentivised to make commercial decisions which may lessen competition in the market, such as avoiding business initiatives that compete against their dealer-owners. Dealer-owners themselves may be incentivised to engage in behaviour that could give rise to competition issues, such as any collusion to impede the development of competing trading platform offerings.
- 28 Finally, owners that are participants may have access to commercially sensitive information and data that should not be used or disclosed improperly.

Owners that are not participants—Material connection with ASX Limited

- 29 In 2014, ASX Limited acquired 49% of Yieldbroker. Potential conflicts may also arise from this relationship—for instance, in relation to fair access to the Yieldbroker markets by participants, vendors and market infrastructure providers that are owned by or in competition with ASX Limited.
- 30 The ownership participation of ASX Limited in the market also means that ASX Limited may have access to confidential data with commercial value. It may also put ASX Limited in a position to make decisions with competition implications, such as blocking business initiatives at the Yieldbroker board that may compete with ASX.

Assessment and findings

- 31 Within the context of Yieldbroker's ownership and participation structure, we reviewed its arrangements for handling conflicts, including its conflicts of interest policy and procedures, conflicts register, Compliance Committee meeting minutes and remuneration policy. We found that a number of those arrangements could be improved. Table 1 sets out a summary of findings and recommendations to further improve Yieldbroker's approach to managing conflicts of interest.
- 32 We also assessed the effectiveness of the conflicts arrangements in practice, and whether actual conflicts appear to have manifested during the assessment period. We examined minutes of the board and various committees, decisions on remuneration, fee schedules, straight-through processing arrangements and contracts with related parties. We interviewed different types of market users (including buy-side and non-owners) and asked about any perceived conflicts. No improperly managed conflicts were detected during the assessment period, although we brought a specific remuneration structure to Yieldbroker's attention and made a recommendation in relation to it.

Table 1: Adequacy of Yieldbroker's conflicts arrangements—Findings and recommendations

Finding	Recommendation
<p>Conflicts of interest policy should be periodically reviewed and should better reflect the specific circumstances of Yieldbroker</p> <p>Yieldbroker's conflicts of interest policy describes the circumstances that give rise to a conflict rather generically and replicates material published in RG 172. The policy could be better tailored to the specific structure and circumstances of Yieldbroker. For instance, it does not appear to have been updated when ASX Limited became the largest owner of Yieldbroker.</p>	<p>Yieldbroker should review its conflicts of interest policy periodically and when circumstances materially change.</p> <p>Yieldbroker should also consider including additional circumstances in the policy. For example:</p> <ul style="list-style-type: none"> • where 'review parties' may be involved such as entities of the ASX Group; and • where interests of the types of participants may conflict because of their ownership status.
<p>Conflicts register does not capture all conflicts</p> <p>The number of conflicts included in Yieldbroker's conflicts register is very low considering the structural potential for conflicts, the actual number of issues by directors and recent commercial decisions by the operator.</p>	<p>Yieldbroker should establish procedures to ensure that all conflicts raised by directors and the compliance function are captured in the register. Directors should be made aware of conflicts added to the register.</p>
<p>Procedures to mitigate risk of misuse of information must be developed and documented</p> <p>Neither the conflicts policy nor other procedures refer to use and disclosure of information. Directors, officers and other employees of Yieldbroker may be privy to non-public information. Such non-public information could be used or disclosed improperly, whether advertently or inadvertently.</p>	<p>Develop procedures and controls for the use and disclosure of non-public information that is gained through ownership interest or compliance-related activities of the operator.</p>
<p>Yieldbroker should consider having a written remuneration policy</p> <p>Yieldbroker's remuneration committee does not refer to written remuneration guidelines to inform its decisions about compensation.</p>	<p>Yieldbroker should consider developing and documenting its remuneration policy:</p> <ul style="list-style-type: none"> • with the involvement of the compliance function; and • considering the impact on remuneration of compliance failures and operational incidents that may affect critical functions.

Corporate governance

- 33 We examined Yieldbroker's governance arrangements and found that those arrangements still reflected, to some degree, the traditional structure of a mutual market and would benefit from a review and an update. During the second part of the assessment period, Yieldbroker engaged in an extensive review of its governance arrangements, for which they are to be commended. We expect that this review will address some of the limitations of governance for a semi-mutualised structure.

Corporate governance and Yieldbroker's semi-mutualised structure

- 34 Yieldbroker's semi-mutualised structure presents two key considerations from a governance perspective:
- (a) representation of members in governance bodies tends to result in large boards and slow decision-making. During the assessment period Yieldbroker's board had 15 members, which is double the size of the board of a typical medium-sized company listed on the ASX;
 - (b) the participant/owner model can give rise to conflicts between the market's commercial interests and the need to ensure that the market is fair, orderly and transparent. These conflicts arise when the market has responsibilities monitoring participants and making decisions under the market rules, as well as in matters of access to data, venue neutrality and commercial decisions. For Yieldbroker, the potential from mutual types of conflicts has been diluted to some extent by ASX Limited's acquisition of 49% of the market. In addition, ASX Limited has brought to the Yieldbroker board the experience of an organisation used to the more stringent governance requirements of a listed entity.

Yieldbroker's governance arrangements

- 35 Yieldbroker's governance arrangements are described in its board charter and other documents. These documents clearly establish the roles and responsibilities of directors, committees and senior management. During the assessment period we observed sound application of governance principles. For instance, the operator conducted extensive checks before appointing senior executives and board members, and their responsibilities were documented in writing and in sufficient detail. The company secretary appropriately discharged her responsibility for the proper functioning of the board and committees. Additionally, our review of board minutes and papers found a well-governed organisation with experienced directors and an adequate level of regard to legal obligations and potential conflicts of interest.
- 36 However, we also identified governance issues typical of traditional mutualised markets. Yieldbroker's board is quite large and, as a reflection of the common owner/dealer nature of its members, lacks diversity. Only the Chair is an independent director.
- 37 In addition, during the assessment period, Yieldbroker lacked a comprehensive risk management framework. The Audit and Risk Committee only dealt with financial reporting and control matters. Consequently, it does not appear that the board had sufficient risk oversight.

Review of Yieldbroker governance arrangements

- 38 As described above, Yieldbroker’s governance arrangements reflect its partially mutualised company structure. However, we did not see any clear evidence that the governance structure hindered the operator’s capacity to make decisions quickly to adapt to market demands.
- 39 From an operational viewpoint Yieldbroker operates a reasonably modern, competitive and flexible market. However, as discussed above, its governance arrangements lag behind to some extent. During the latest part of the assessment period Yieldbroker conducted a comprehensive board review. This review was overdue, as it is a good governance practice to ensure that the board has an effective value-adding structure and that its performance is periodically reviewed.
- 40 At the close of the assessment period the operator was in the process of implementing the recommendations resulting from the review. Generally, we are of the view that those recommendations address most of the issues we identified in relation to Yieldbroker’s governance arrangements.

Assessment and findings

- 41 Table 2 sets out a summary of findings and recommendations in relation to Yieldbroker’s governance arrangements.

Table 2: Yieldbroker’s governance arrangements—Findings and recommendations

Finding	Recommendation
<p>Board structure could be updated and modernised</p> <p>At the commencement of this assessment, Yieldbroker’s board structure had not been reviewed for many years. The board composition reflected a mutual structure but the business operated in a competitive environment, independently of the particular interest of each dealer-owner or of ASX.</p>	<p>Complete the implementation of the board review already underway.</p>
<p>Risk management arrangements should be improved</p> <p>The organisation lacks a comprehensive risk management framework. The Audit and Risk Committee mostly deals with financial reporting and control matters, and it does not appear that the board has sufficient risk oversight.</p>	<p>Develop and document a comprehensive risk management framework and review the company’s governance arrangements so that the board is more effective at setting risk appetite and overseeing the risk management framework.</p>

Finding	Recommendation
<p>Compliance/secretarial function under-resourced</p> <p>During the assessment period, we found that Yieldbroker's compliance function was severely under-resourced. This may have been the reason behind some of the findings of this review such as the market lacking an up-to-date compliance manual, lack of review of the conflicts policy, etc.</p>	<p>Increase resources to discharge the responsibilities currently allocated to the head of compliance. Note that by the end of the assessment period Yieldbroker had hired an additional compliance officer.</p>

C Supervision and enforcement

Key points

We assessed Yieldbroker's arrangements for supervising its markets and found that they were broadly adequate. This was further supported by the favourable views participants had about the integrity of the Yieldbroker platform and Yieldbroker as an operator.

In addition, we conducted a limited review of the effectiveness of the alerts and surveillance procedures for a specific period, which did not identify any participant misconduct concerns.

We also found that the human resources allocated to surveillance within Yieldbroker are adequate considering the size of the organisation.

However:

- Yieldbroker's surveillance procedures need to be better documented and their implementation more robustly monitored;
- we identified potential improvements in the design and operation of some of the market's automated alerts; and
- we identified additional types of conduct that Yieldbroker could consider monitoring.

- 42 The rules prohibiting abusive trading practices on the Yieldbroker market reside in Yieldbroker's operating rules as the operator is responsible for the supervision of its market for participant misconduct (reg 10.15.02 of the Corporations Regulations 2001).

Arrangements for supervision and enforcement

- 43 Yieldbroker's operating rules provide that participants must conduct themselves 'in a manner which is honest, fair, and efficient so as to promote the ongoing protection of market integrity and in a manner that is consistent with just and equitable principles in the transaction of business'.
- 44 The operating rules also identify a variety of prohibited forms of conduct and disorderly or anomalous trading that participants undertake not to engage in—for example, they must not breach the Act 'in connection with (i) market manipulation, (ii) front running, (iii) insider trading', among other trading practices. In total, Yieldbroker's operating rules and procedures identify 16 types of misconduct and disorderliness and 10 patterns of behaviour as indications of these.

- 45 Yieldbroker uses various real-time alerts and audit log reviews to ensure conduct is consistent with the operating rules. It also identifies breaches through complaints or disputes raised by participants and by participants' self-reporting of breaches, including a participant's annual notice of breaches. In practice, though, Yieldbroker's in-house automated market surveillance system is the primary tool used for monitoring the markets it operates.
- 46 The Market Operations team is responsible for initially reviewing the real-time alerts. An alert may be closed by the Market Operations officer who initially reviewed it or referred to a second Market Operations officer for further investigation. Additional escalation may be to the Compliance Officer who may also refer it to the participant's own compliance unit. The Compliance Officer may ultimately decide on recommending disciplinary action to the Compliance Committee.

Assessment and findings

Assessment approach

- 47 In assessing Yieldbroker's arrangements for supervising its markets, we analysed:
- (a) the appropriateness of Yieldbroker's systems and procedures for monitoring and surveillance;
 - (b) the effectiveness of the surveillance function; and
 - (c) the resourcing of the surveillance function.

Appropriateness of Yieldbroker's procedures for market monitoring and surveillance

- 48 We compared the types of misconduct, disorderliness and abnormalities that Yieldbroker identifies in its operating rules and procedures with the actual trading behaviours that Yieldbroker is specifically set up to monitor. We found that the market rules and the operator's supervisory procedures could be more closely aligned.
- 49 We also examined Yieldbroker's practical application of its market monitoring and surveillance procedures. There is scope for closer alignment between the monitoring procedures that Yieldbroker sets out in its operating procedures and market management procedures and the actual monitoring practices that Yieldbroker follows.
- 50 Finally, Yieldbroker has not cohesively documented how its monitoring and surveillance activities are aligned with, and satisfy, its obligation to monitor and enforce compliance with its operating rules.

- 51 Table 3 sets out a summary of findings and recommendations in relation to Yieldbroker's procedures for market monitoring and surveillance.

Table 3: Yieldbroker's procedures for market monitoring and surveillance

Finding	Recommendation
<p>Yieldbroker's compliance manual not finalised</p> <p>A compliance manual should be the key document containing Yieldbroker's procedures for monitoring compliance by participants and compliance by Yieldbroker with its licence obligations.</p> <p>While Yieldbroker appears to be conducting a range of appropriate compliance activities, without a manual it is difficult to fully conclude that Yieldbroker is taking a comprehensive and cohesive approach to compliance monitoring.</p>	<p>Yieldbroker must finalise and submit to ASIC, within three months from the date of this report, a compliance program including, among other things, arrangements for monitoring compliance by participants with the operating rules.</p>
<p>Not all surveillance procedures implemented</p> <p>For the assessment period, Yieldbroker did not demonstrate that it adequately discharged compliance analysis in keeping with its own operating procedures.</p>	<p>As part of finalising its compliance manual, Yieldbroker should carefully review its suite of surveillance procedures and clearly determine, and present to ASIC, its priorities and scope for appropriate, and appropriately resourced, real-time, regular periodic and other ad hoc proactive and reactive surveillance procedures.</p>

Effectiveness of the current surveillance function

- 52 Yieldbroker's surveillance function (as implemented) consists primarily of the automated alerts generated by the market surveillance system and the review and analysis of the alerts by Market Operations staff with possible escalation to the Compliance Officer.

The market surveillance system

Summary of analysis and conclusions

- 53 We analysed the detailed alerts specifications and sample alerts data for August and September 2017 and the associated trading data for the same period.
- 54 We concluded that the designs of the implemented alerts were generally fit for purpose and generally operated as intended. We found:
- (a) areas of potential improvements in the operation of some of the alerts; and
 - (b) additional aspects of market and trading data and conduct that Yieldbroker should incorporate into their monitoring activity.

- 55 Yieldbroker should regularly review the ongoing appropriateness of the alerts set and alerts design.
- Review of alerts raised*
- 56 Yieldbroker should have better documentation for its decision-making in relation to the review and analysis of individual alerts raised. This would enable a more systematic review of the judgements that Yieldbroker uses to close alerts.
- 57 However, discussions with Yieldbroker and a spot check of various alerts did not reveal any cause for concern.
- 58 Table 4 sets out a summary of findings and recommendations in relation to the effectiveness of Yieldbroker’s surveillance function.

Table 4: Effectiveness of Yieldbroker’s surveillance function

Finding	Recommendation
<p>Potential enhancements in implemented alerts</p> <p>We identified potential improvements in the design and operation of some of the alerts. We shared these findings with Yieldbroker.</p>	<p>As part of our recommended fit-for-purpose review of the alerts set and design, Yieldbroker should consider enhancing several alerts as discussed with ASIC.</p>
<p>Conduct not monitored</p> <p>Yieldbroker has not finished implementing in its surveillance system some features originally recommended by its alerts design study.</p> <p>Yieldbroker should review more regularly the ongoing appropriateness of the alerts set and alerts design.</p> <p>There is additional market activity that could be relevant to monitor, and which could be monitored by some form of automated alerts.</p>	<p>Yieldbroker should conduct a fit-for-purpose review of the alerts set and design, including whether the alerts set should be broadened and/or narrowed and whether the designs should be changed in terms of the market data and parameter inputs, logic used and outputs provided.</p>
<p>Alert outcomes not holistically reviewed</p> <p>Yieldbroker should consider reviewing its alert outcomes across different dimensions. Such reviews can highlight anomalies that may indicate that alerts are not operating as intended for particular types of trades or market events.</p>	<p>Yieldbroker should consider methodologies for periodic reviews of alert outcomes across different dimensions of market activity with a view to confirming alerts applicability or identifying anomalies in their operation.</p>

Other observations

Yieldbroker-wide view of participant conduct

- 59 A compliance function should not solely rely on procedural information such as alerts, complaints, disputes or participants’ self-reporting of breaches. Better practices that we observe among market operators include strong

cultures of internal information sharing and cross-referral, where an operator's staff at all levels and for all business functions are aware that their interactions with participants may give rise to information about participant practices that may usefully inform the compliance function with background or contextual information as well as possible breach information.

60 Yieldbroker has implemented periodic cross-departmental meetings, including involving the compliance function, to discuss market and participant activity and developments. This provides a means by which the compliance function can acquire information other than purely procedural information.

61 A compliance function's assessment of matters can also be informed by a good understanding of the context of a participant's business activities beyond the immediate events surrounding a particular matter. For example, Yieldbroker could consider maintaining participant profile overview documents that would provide contextual baselines of 'normal behaviour' against which abnormal or changed behaviour can be judged.

Information about Yieldbroker's platform operations available to participants

62 A fair and transparent market operation requires that users have access to sufficient information about the operation and functionality of the market.

63 Yieldbroker does not appear to have a consolidated user guide or other procedural information that explains the features of the market and how they operate, particularly in terms of the various methods used for executing transactions. During our assessment and discussions with users, we found that, in some cases, the dealers appeared unclear about the rules governing the operation of a particular trading feature. We also became aware of features and functionalities of the market that were not referred to in the operating rules or operating procedures.

64 Yieldbroker's usual procedure for informing users about the introduction of such features is to broadcast it to participants in the form of 'factsheets', or other specifications or descriptions, that are created and distributed by Yieldbroker's Business Development unit.

65 There does not appear to be a consolidated document or suite of reference documents—such as a user guide—that brings together all the descriptions of Yieldbroker functionality in one place.

66 Table 5 sets out a summary of findings and recommendations in relation to the transparency of Yieldbroker's operations.

Table 5: Transparency of operation

Finding	Recommendation
<p>More transparency about Yieldbroker's platform operations should be made available to users</p> <p>New features broadcast to users in terms of Business Development 'factsheets' or other specifications/descriptions. There does not appear to be a consolidated suite of reference documents.</p>	<p>Create user guide.</p>

Surveillance function resourcing

- 67 In addition to the alerts system, we examined the human resourcing of the surveillance function. We concluded that it was sufficient for an organisation of Yieldbroker's size, considering its current surveillance arrangements.

D Systems and controls

Key points

We assessed Yieldbroker's systems and controls, with emphasis on the market's technology governance, approach to operational risk and cyber resilience posture. We found Yieldbroker's arrangements were sufficient and adequate given the nature, size and complexity of the market. However, we also found that Yieldbroker's technology governance could be improved by enhancing board reporting and engagement.

Regarding cyber resilience posture in particular, Yieldbroker undertook a significant program of work during the assessment period to improve its cyber resilience profile across all major areas of the NIST Cybersecurity Framework.

- 68 Under s792A(d) of the Corporations Act, market licensees are required to have sufficient resources (including financial, technological and human resources) to operate the market properly.
- 69 In this section we assess the extent to which Yieldbroker met its obligations to have sufficient resources to properly implement systems and controls and manage cyber resilience. We placed particular emphasis on cyber resilience as it is now regarded as one of the most significant concerns for the financial services industry and the economy at large. Given the central role that financial market infrastructure providers play in our economy, their cyber resilience is of particular importance.

Technology governance and operational risk

- 70 We examined the adequacy of Yieldbroker's systems and controls including its arrangements for business continuity planning and disaster recovery, capacity management and stress testing, change management and outsourcing, and third-party interdependencies and testing. We found those arrangements were sufficient and adequate given the nature, size and complexity of the market.
- 71 In September 2018, we published [Report 592](#) *Review of ASX Group's technology governance and operational risk management standards* (REP 592). The report discusses the importance of effective enterprise risk management for market operators and highlights the strategic value that can be delivered by an embedded, high-quality enterprise approach to the management of operational risk. Those observations are applicable to

Yieldbroker. We note that Yieldbroker has made significant progress in recent times by implementing an enterprise risk management program that has recently reviewed the whole-of-organisation enterprise architecture. Yieldbroker has also decisively invested in business solutions to effectively manage and monitor the workflow related to technology systems and controls.

- 72 On technology governance, REP 592 considers the importance of board and senior management engagement in different areas relating to technology, including risk management, enterprise architecture, technology strategy and technology effectiveness with reference to recognised frameworks. From our review of Yieldbroker's board activity, we found that a more formal framework for reporting to the board on those areas would improve the board's ability to engage critically and strategically in those areas. As we say in REP 592, a strong 'tone from the top' that demands clear information to support strategic board decision-making, and the skills and capability at the board level to meaningfully interrogate and evaluate the information being reported, are key to achieving effective board reporting. We note that Yieldbroker's current board and governance review is addressing those factors.

Cyber resilience

Overview of assessment process

- 73 For this assessment of Yieldbroker's level of cyber resilience we used the NIST Cybersecurity Framework. This framework has been used as part of ASIC's ongoing cyber assessment of regulated financial institutions and market infrastructure providers, including in [Report 468](#) *Cyber resilience assessment report: ASX Group and Chi-X Australia Pty Ltd* (REP 468) as well as [Report 555](#) *Cyber resilience of firms in Australia's financial markets* (REP 555).

Analysis

- 74 For this assessment we reviewed the results of two NIST cyber self-assessments completed by Yieldbroker in December 2016 and May 2018. We also requested and reviewed supporting documentation and conducted further detailed inquiries through discussions with Yieldbroker to clarify responses and seek further information.

December 2016 NIST cyber self-assessment

75 Yieldbroker first completed a NIST cyber self-assessment in December 2016 as part of ASIC's first round of assessments of regulated financial institutions and market infrastructure providers.

76 At that time, Yieldbroker's self-assessment placed them in the mid-range of financial institutions and market operators that were assessed by ASIC. Yieldbroker noted in their initial assessment that they had recently engaged two specialist cybersecurity firms to undertake a cybersecurity review of Yieldbroker and to assist in the development of policies and procedures to help Yieldbroker develop an information security management system (ISMS) based on widely accepted industry frameworks.

Cybersecurity strategy support project

77 In 2016, Yieldbroker commenced a cybersecurity strategy support project which consisted of two deliverables:

- (a) responding to ASIC's request to complete a NIST Cybersecurity Framework questionnaire; and
- (b) developing a security roadmap to plan improvements in Yieldbroker's cybersecurity posture.

78 The main findings of the external cybersecurity review of Yieldbroker were that:

- (a) Yieldbroker's cybersecurity posture was found to be typical of small- and medium-sized enterprises within the financial technology sector;
- (b) Yieldbroker performed well from a technical standpoint, with technology configured securely, and information technology service management and security processes functioning well, albeit informally; and
- (c) uplift was required in certain areas relating to security governance and the documentation of certain processes to ensure effective performance in responding to and dealing with cybersecurity incidents.

79 The external contractor made a number of recommendations for improving the maturity of Yieldbroker's security practices.

Cybersecurity review report

80 Yieldbroker engaged an additional third party in the second half of 2016 to provide a cybersecurity review of the people, processes and technology used to prevent and respond to security threats which may face the organisation.

81 Its overall internal cybersecurity defensive posture was found to be strong. The assessor noted that, due to the nature of the business, Yieldbroker's

cybersecurity posture exceeded what many organisations would consider adequate.

- 82 The review made a number of recommendations for enhancement to Yieldbroker's cybersecurity posture that, if implemented, would bring it closer to achieving official Australian Government security standard recognition as well as further enhancing Yieldbroker's capacity to mitigate the potential impacts of a successful intrusion.

Presentation of review findings to Yieldbroker's board

- 83 The results of the cybersecurity review commissioned by Yieldbroker were presented to the board at its meeting on 16 February 2017.
- 84 Along with reporting the review findings, Yieldbroker's management presented a plan to implement the recommendations from the external reviews that would be carried out over the remainder of the 2017–18 financial year as part of a program of work targeting compliance with international information security management standards and the NIST security status reporting framework. It was agreed by the Yieldbroker board that work on the changes should start immediately.
- 85 In 2017, a significant amount of work was undertaken to improve Yieldbroker's cyber resilience. During our assessment, we reviewed the cyber uplift work and asked Yieldbroker to complete an additional NIST cyber self-assessment to more accurately reflect their current cyber resilience level.
- 86 The second NIST cyber self-assessment was completed in May 2018. A comparison of the results for the 2016 and 2018 self-assessments demonstrates that notable improvement has been achieved in cybersecurity practices across most NIST categories.
- 87 The 2018 self-assessment also shows that in addition to the uplift already achieved, Yieldbroker is targeting further uplift across all major NIST categories over the next 18–24 months. This is consistent with ASIC's vision of continual improvement in the cybersecurity posture for financial market infrastructure.

Good practice—Cybersecurity strategy and governance

- 88 To ensure Yieldbroker is in line with other ASIC-regulated entities that are demonstrating best practice in this area, Yieldbroker may benefit from undertaking further work in relation to its governance of cybersecurity.
- 89 During the assessment period, board reporting of cyber-related matters has been on an infrequent and ad hoc basis.

- 90 We note that Yieldbroker has undertaken a review of the board structure, as well as the composition and functions of the subcommittees that report to the board.
- 91 In REP 468 there are some useful examples of what good practice looks like in cyber resilience as well as what boards should be considering and how.
- 92 The good practices we observed in relation to cybersecurity strategy and governance were characterised by board ‘ownership’, and responsive and agile governance models (see REP 468).

Assessment and findings

- 93 Overall, our assessment concluded that, during the relevant period, Yieldbroker met its statutory obligations to have sufficient resources for the management of cyber resilience and exhibited continual improvement.
- 94 We reviewed Yieldbroker’s documentation for managing cyber resilience and found that, while a significant amount of work had been undertaken and was being implemented by Yieldbroker staff, the messaging and discussion related to cyber resilience at board level appeared to be undertaken on an irregular or ad hoc basis.
- 95 Table 6 sets out a summary of findings and recommendations in relation to Yieldbroker’s cybersecurity posture.

Table 6: Yieldbroker’s cybersecurity posture

Finding	Recommendation
<p>There is scope for a more formalised governance process for technology and cyber resilience</p> <p>During the assessment period, reporting on technology and cyber resilience initiatives to the board was done on an infrequent or ad hoc basis. A more formal framework for reporting on those areas will improve the board’s ability to engage critically and strategically with them.</p>	<p>The board should develop procedures to ensure ownership of cybersecurity strategy and ensure it is reviewed on a periodic basis to assess progress against success measures that are clearly articulated and defined.</p>

Key terms

Term	Meaning in this document
ASIC	Australian Securities and Investments Commission
Australian market licence	Australian market licence under s795B of the Corporations Act that authorises a person to operate a financial market
Ch 7 (for example)	A chapter in the Corporations Act (in this example numbered 7)
Corporations Act	<i>Corporations Act 2001</i> (Cth), including regulations made for the purposes of that Act
ISMS	Information security management system
market licensee	Holder of an Australian market licence
NIST Cybersecurity Framework	US National Institute of Standards and Technology Cybersecurity Framework for critical infrastructure
Pt 7.2	A part in the Corporations Act (in this example numbered 7.2)
s794C (for example)	A section of the Corporations Act (in this example, numbered 794C), unless otherwise specified

Related information

Regulatory guides

[RG 172](#) *Financial markets: Domestic and overseas operators*

Legislation

Australian Securities and Investments Commission Act 2001, s30

Corporations Act, Ch 7; Pt 7.2; s792A(c), 794C,

Corporations Regulations 2001, reg 10.15.02

Reports

[REP 468](#) *Cyber resilience assessment report: ASX Group and Chi-X Australia Pty Ltd*

[REP 555](#) *Cyber resilience of firms in Australia's financial markets*

[REP 592](#) *Review of ASX Group's technology governance and operational risk management standards*

Other publications

[NIST Cybersecurity Framework](#)