

Australian equity market structure – Background

What material did ASIC publish on equity market structure on 4 November?

1. Consultation paper on Australian equity market structure (CP 145). The consultation paper:
 - provides background on the Australian equity market and outlines how we think it is evolving, including with competing exchange markets
 - proposes market integrity rules to address some of the regulatory issues resulting from market developments. The regulatory controls set out here are necessary irrespective of whether there are competing exchange markets. However, competition will give them greater impetus; and
 - proposes market integrity rules to address the additional regulatory issues resulting from the introduction of competition.
2. Draft market integrity rules enable readers to more fully consider and respond to the proposals.
3. Report on Australian equity market structure (REP 215) provides more detail on equity market structure and how it is changing globally, as well as a discussion of the likely impact of our proposals.
4. Overview of CP 145 and REP 215. This Overview is the same as Part 1 of CP 145, but has been provided as a separate document for those just seeking a synopsis of the issues and proposals.

Who do the proposals apply to and in relation to what products?

The proposals apply to Australian market licensees that offer trading services in shares, managed investment schemes and CHESS Depository Interests admitted to quotation on the ASX and participants of such markets. We refer to these as ‘market operators’, ‘equity market products’ and ‘market participants’ respectively in CP 145 and REP 215.

We are seeking feedback on whether certain proposals should be extended to other persons (e.g. fund managers and so called ‘white labellers’ that indirectly access markets via a market participant) and we think that it may be appropriate for many of the proposals to apply to other products and markets. We are seeking feedback on these issues.

Who should read the consultation material?

We expect the proposals in the consultation paper will impact:

- market participants, ASX and prospective operators of markets in equity market products—as some of the proposals apply to them directly;
- persons who access markets indirectly through a market participant’s infrastructure—as certain proposals relate to the relationship between them and market participants; and
- frequent investors in the equity market and issuers of equity market products—the proposals relate to how markets will function, potentially impacting asset valuation and capital raising.

Table 8 of CP 145 identifies the proposals that will impact on the categories of persons above.

What impact does the proposed merger between ASX and Singapore Exchange have on the proposals?

The market issues raised by the ASX and Singapore Exchange merger implementation agreement are distinct from those addressed in the consultation paper, and the merger proposal will be subject to various government, regulatory and shareholder approvals. For these reasons, the consultation paper does not deal with issues associated with those approvals. However, the regulatory framework set out in the consultation paper will apply to all operators offering trading in equity market products, and participants operating in Australia.¹

What is competition for market services?

On 31 March 2010, the Australian Government announced its support for competition between exchange markets for trading in listed shares in Australia, and in-principle support for granting an Australian market

¹ Equity market products are: shares, managed investment schemes, and CHESS Depository Interests admitted to quotation on the ASX.

licence to Chi-X Australia Pty Ltd (Chi-X). Chi-X intends to offer trading services in products in the S&P/ASX 200 index and will compete directly with ASX in respect of these securities.

When is competition expected to be implemented?

We aim to have the regulatory framework for the introduction of competition in place as soon as practicable in 2011, when the necessary framework is in place and the market is ready. Ultimately the decision to approve a new market operator and competition (and the timing) is one for the Government.

Will there be transitional arrangements?

We expect that some proposals will take time and investment to implement and that some proposals are not essential to enable competition for exchange market services to commence. We expect that some proposals may be implemented soon after competition commences and others may need to be implemented in stages over a longer period of time. We seek feedback on whether transitional requirements are necessary and what those arrangements should be. See Table 7 in CP 145 for those proposals we think are essential for the start of competition.

We raise a number of options to facilitate smooth implementation of best execution.

What changes will be made to the regulatory framework in Australia to address recent market developments and the introduction of competition?

Independent of the granting of new market licences, we consider it important to review and update the regulatory framework in place in Australia to ensure that it keeps pace with technological developments and global financial market trends. Competition will provide impetus for these issues to be addressed. New market integrity rules are being proposed to:

- manage multiple exchange markets, including to ensure market operators cooperate and share information, to coordinate responses to extreme price movements and other events, and to ensure market data from various market operators is brought together into a single view; and
- address regulatory issues posed by market developments such as dark pools, direct electronic access, algorithmic trading and high-frequency trading.

A summary of ASIC's proposals is attached to the ASIC Media Release 10-227MR

Why is ASIC addressing wider market structure issues now?

We consider it important to respond to recent and likely market developments in Australia as these trends are driving market structure irrespective of whether competing exchange markets are introduced.

What are the likely advantages and disadvantages of recent market developments and competition on the Australian equity market?

Based on the experience overseas, the introduction of competing exchange markets is expected to result in:

- more innovation in products and services, more choice in trading venues, and maintained or improved market quality (including market depth, liquidity and price formation). This may attract new players, new trading strategies and new liquidity.
- faster and more efficient trading experience resulting from developments in technology; and
- reduction in overall costs of execution, due to tighter spreads and a reduction in transaction costs.

In the absence of an appropriate regulatory framework it can also result in:

- fragmentation of liquidity across exchange markets and crossing systems. Market information will also fragment across exchange markets, which could potentially affect the quality of the price formation process. ASIC's proposals are intended to protect against the risk of too much order flow moving from pre-trade transparent execution venues to non-transparent execution venues, as well as having a mechanism in place to consolidate pre-trade and post-trade information across execution venues;
- the potential for the quick erosion of liquidity resulting from the interaction between automated execution programs and algorithmic trading. This can result in disorderly markets. The greater risk of market

volatility may impact on the fundraising capacity of listed companies. ASIC's proposals will require market operators to cooperate in having consistent market controls to reduce and mitigate this risk; and

- greater spending on technology and data, including for compliance and surveillance, as a result of an increased focus on automated trading strategies and speed.

We are conscious of the potential regulatory issues posed by the entry of competition, and the need to ensure that the benefits that can flow from competition are not outweighed by a reduction in market quality or integrity. Our regulatory proposals are intended to respond to these issues so that we gain the benefits of greater market efficiency and opportunities for innovation, while mitigating risks to price formation and delivering the best outcome for investors.

How will the market work with multiple exchange markets?

Based on overseas experience and domestic industry soft soundings, it is likely the Australian market will have the following features:

- There will be more than one execution venue offering trading services in equity market products. Therefore investors and market participants will need to make order routing decisions. This order routing decision is not completely new as there is already a choice between ASX's order book, VolumeMatch and CentrePoint, as well as a number of broker crossing systems.
- Market participants will need to develop policies and procedures to reflect the new environment (e.g. how to deliver best execution for their clients).
- Systems will be required to identify the market with the best prices and volume. We expect vendors to offer systems solutions to assist (e.g. smart order routers). These systems may encourage new forms of traders and strategies.
- There will need to be a means for investors to obtain timely and cost effective consolidated pricing.
- There will be new connectivity between markets, market participants and ASIC for trading services and information sharing.
- There will need to be coordination between market operators (e.g. relating to trading halts).
- We expect there will be limited changes to the retail investor experience. They will look to their broker to provide services and to take account of the new multimarket environment.
- ASIC will make need to enhance our use of IT systems to supervise market conduct across the whole market.

What impact could the proposals have on market operators and participants?

Area	Possible impacts— market operators	Possible impacts— market participants
Technology	<p>Market operators will need systems to:</p> <ul style="list-style-type: none"> control order entry into matching engines; automatically halt trading; capture and route additional data for execution quality statistics and for ASIC surveillance; incorporate changes to pre-trade transparency arrangements; and synchronise clocks in trading and reporting systems to a universal clock. 	<p>Market participants will need systems (either their own or those of third parties) that:</p> <ul style="list-style-type: none"> filter client orders and can disable direct electronic access (DEA) and algorithms; can process market data, determine to which execution venue to route orders based on predefined parameters and then route the orders; and capture and route additional data for execution quality statistics (if operating an execution venue), for trade publication and for ASIC surveillance.
Human resources	<p>Market operators will need staff to:</p> <ul style="list-style-type: none"> consider the implications of the proposals, including the impact on technology; cooperate with ASIC and other market operators; provide investor education about the consequential changes for their market; and provide training to other staff. 	<p>Market participants will need staff to:</p> <ul style="list-style-type: none"> consider the implications of the proposals, including the impact on technology; assess if DEA client agreements are sufficient; monitor compliance with best execution arrangements and review the arrangements; make best execution disclosures to clients; and provide training to other staff.
Compliance policies and procedures	<p>Market operators will need to:</p> <ul style="list-style-type: none"> review existing policies and procedures and amend where necessary; put in place new policies and procedures for trading halts and trade cancellations; and have procedures for ensuring clocks remain synchronised. 	<p>Market participants will need to:</p> <ul style="list-style-type: none"> review existing policies and procedures and amend where necessary; and put in place new best execution policies and procedures.

What impact could the proposals have on other stakeholders?

Stakeholder	Possible impacts
Issuers/listed companies	<p>The proposals will impact issuers/listed companies as they relate to how equity markets in Australia will function. The proposals are designed to promote market quality (i.e. to promote the price formation process on pre-trade transparent markets) and assist in capital raising and asset valuation. There is also the potential for greater depth and liquidity in the market.</p>
Institutional investors (buy-side)	<p>Competition among trading venues in other jurisdictions has led to more innovation in products and services, more choice in where and how orders are executed, and lower execution costs.</p> <p>Based on overseas trends, we also expect to see significant growth in algorithmic trading and HFT. We expect the increased presence of HFTs to lead to greater emphasis on speed, demand for increased capacity and direct electronic access, enhanced co-location facilities, new order types, and low latency data feeds. Our proposals are designed to enhance controls on this type of electronic trading.</p>
Retail investors	<p>Based on experience overseas, we expect it will be generally a positive story for retail investors, with limited change to their trading experience and better prices. They will look to their broker to provide services and to take account of the new multimarket environment. A consolidated view of prices from all markets will be available and retail clients should expect to receive a single trade confirmation, even if an order is executed across multiple markets.</p> <p>We are proposing an obligation on market participants to take reasonable steps to obtain the best result for their clients (i.e. best execution). This will ensure participants act in the best interests of their clients.</p>

How are market developments and competition relevant to issuers / listed companies?

Some of the proposals that may impact issuers are:

- *Responses to extreme price movements* – market operators must have automated order entry controls and ‘circuit breaker’ type functionality to address extreme price movements. This is intended to contribute to orderly markets in listed securities.
- *Pre-trade transparency* – the potential proliferation of dark pools and other internalisation activity would be to the detriment of issuers and listed companies who rely on prices on pre-trade transparent markets (and prefer deep liquid markets) for asset valuation, to inform investment decisions and to support fundraising. To manage this we propose common pre-trade transparency market integrity rules designed to promote the use of pre-trade transparent orders.
- *Consolidation of pre-trade and post-trade information* – we intend to bring about an outcome of consolidated information being available to market users. We see consolidated information as fundamental for efficient price formation, and therefore for the ability of issues to assess the value of their securities and raise capital.

What impact did the 6 May ‘flash crash’ have and what were the lessons?

The ‘flash crash’ had limited direct impact in Australia. The market structure and regulatory environment in Australia is different from the US (e.g. nature and size of market, presence of high-frequency traders (HFTs), number of execution venues, obligations on professional liquidity providers). We nevertheless have been carefully reviewing the lessons from this incident. We are proposing that market operators:

- have in place order entry controls that prevent anomalous orders from being entered (these controls are sometimes called price bands, collars, limit up/limit down);
- have controls in place to automatically limit certain priced orders from executing during extreme market movements (i.e. volatility controls); and
- provide certainty and transparency around trade cancellations.

We are seeking comments on appropriate thresholds and timeframes for volatility controls. Our proposed measures are intended to enhance the level of confidence in the Australian market and encourage investor participation. The objective is to preserve market quality and the price formation process. We are paying considerable attention to the US proposals in their response to the 6 May ‘flash crash’ and to the outcome of the circuit breaker pilot programme. We are in contact with other regulators around the world about the effectiveness of controls such as these in the respective jurisdictions.

We also think that our proposals relating to direct electronic access (DEA), algorithms, and market operator cooperation address many of the lessons from 6 May.

What impact is high-frequency trading (HFT) having on markets and what steps is ASIC taking to mitigate negative impacts?

There are a number of overseas and international reviews on the impact of HFT. Accordingly, we are seeking general views on the impact and issues related to HFT in the Australian market. We expect growth in high-speed trading to lead to greater emphasis on latency and demand for increased market capacity, enhanced co-location facilities, new order types, and increased demand for DEA. HFT potentially provides benefits, such as contributing to price formation, keeping prices similar between execution venues, and the provision of liquidity and tightening of spreads (although potentially with lower depth at the best prices). However, it also raises questions about:

- fairness— high-frequency traders’ speed of access to markets and data compared with other investors;
- the impact of high-frequency traders’ speed and volume of order entry and cancellation on price formation;
- HFT’s impact on long-term investor confidence in markets;
- HFT’s impact on data and data management costs; and
- the necessary risk controls.

The proposed rule framework addresses a number of regulatory issues arising from increased HFT in our market:

- *Algorithmic trading*—algorithms must be appropriately understood and tested before use; regularly reviewed once deployed; and able to be immediately disabled. This will constrain the occurrence of aberrant algorithms. We are seeking feedback as to whether there should be formal HFT obligations.
- *Direct Electronic Access*—we propose to continue to require pre-trade controls for DEA and have minimum client standards, including a legally-binding contract and due diligence between the market participant and its DEA client.
- *Market operator controls*—controls on order entry to prevent anomalous orders from entering the market; stock-specific and market-wide volatility controls to mitigate extreme price movements; and harmonised and transparent trade cancellation policies.
- *Tick sizes*—harmonised tick sizes across markets, to limit the possibility of stepping ahead of better-priced orders by economically insignificant amounts.
- *Surveillance*—unique identifiers for algorithms and DEA orders to enhance ASIC's surveillance capacity.
- *Education*—possible measures to improve investor education about high-frequency trading.

What impact do dark pools have on price formation and how is ASIC addressing their growth?

Pre-trade transparency is generally regarded as central to both the fairness and efficiency of a market, and in particular to its liquidity and quality of price formation.

There is an inherent tension between the short-term private advantages for a subset of the market of trading in the dark (i.e. potential price improvement), and the long-term public good of contributing to the price formation process, which gives investors confidence and promotes the interests of issuers and the broader community in an efficient secondary market for equities. Too much dark liquidity may result in wider spreads and worse prices for trades done both on pre-trade transparent markets and in the dark. This is because spreads in pre-trade transparent markets are likely to widen in response to there being less uninformed transparent orders (i.e. because traders want to avoid trading with informed traders in order to reduce the possibility of the market moving against them after they enter into a position). Wider spreads means worse prices on pre-trade transparent markets as well as for those transacting in the dark, because dark trades reference prices on pre-trade transparent markets.

There is a recent trend for smaller trades to shift into dark pools and there is a risk that if too much liquidity shifts, the quality of the price formation process on-market will deteriorate. To address this concern we propose to limit the volume of non-pre-trade transparent orders. Our proposal is to require trades below \$20,000 to be done on a pre-trade transparent basis, requiring lit orders to take time priority over undisclosed orders within a central limit order book, and to require dark pool operators to periodically report to ASIC on their nature and volume of trading.

Do dark pools already exist in Australia?

Dark pools exist in Australia to a smaller extent than they do in the US and Europe. Most of the dark pools in Australia have been developed by institutional brokers for their upstairs trading e.g. CrossFinder (Credit Suisse), Price Improvement Network (PIN - UBS) and Sigma-X (Goldman Sachs). ITG Posit and Liquidnet operate dark pools with participation beyond their brokerage clients.

In June 2010, ASX introduced its own version of a 'dark pool' called VolumeMatch to facilitate large volume trades at prices that reference the central limit order book and CentrePoint which matches trades at the mid-point of the spread on the central limit order book.

Will investors be able to see a consolidated view of prices across all trading venues (consolidated tape)?

We consider that a consolidated source of trade information that is available for a reasonable price to all users is a fundamental element of a fair, orderly and transparent market.

There is a risk that fragmentation of trading data across markets may hinder price formation if a consolidated view of pricing is not easily available. This is because investors may not see all of the information that is relevant to make an informed investment decision, and price discrepancies between markets might last longer than they otherwise would. This may result in some investors trading at a less advantageous price because they do not have access to full price information.

We are considering several options to deliver consolidated information, including the possibility of creating either a single information consolidator or approving multiple pre-trade and post-trade information

consolidators. We are considering imposing obligations on data consolidators to ensure certain standards are met.

How will investors' interests be protected (best execution obligations)?

Best execution obligations promote efficiencies by ensuring orders are directed to the venue that offers the best result. It is also an important investor protection mechanism because it ensures that market participants do not place their own interests ahead of those of their clients and that clients receive the best result.

We are proposing that market participants take reasonable steps when handling and executing a client order to obtain the best 'total consideration'. Professional clients (as defined under s9 of the Corporations Act) and clients dealing in sizes above \$500,000 may nominate factors other than 'total consideration'.

We intend to interpret this requirement as 'best price' for non-professional clients while there are not material differences in costs. For example, if there were a competitor clearing house with materially different prices.

Can a participant of ASX choose not to connect to new markets?

As an interim measure, for those parties that would prefer more time to prepare to connect to multiple markets, we are considering explicitly limiting the best execution obligation to a single market for a 12 month transitional period to reduce the burden of connections to multiple markets.

However, we would still expect all market participants to take reasonable steps to achieve the best total consideration (or best price) on that market. If a market participant chooses not to connect to a market, it may choose to consider the advantages of indirect market access.

How will investors know whether they receive best execution?

We are proposing that market participants demonstrate compliance with their execution arrangements. To facilitate this we propose that:

- market participants publish a monthly report on order routing in equity market products; and
- execution venues (i.e. market operators, operators of crossing networks and internalisers) publish monthly reports on execution quality, including on liquidity, prices, speed and execution certainty.

Taken together, these reports should substantially improve the ability of clients to evaluate what happens to their order after it has been provided to a market participant for execution. This should encourage clients to route orders to market participants that more consistently provide the best result.

In the context of multiple markets, we will ensure there is consolidated market data. This will provide a whole-of-market pre-trade and post-trade reference point, which will also contribute to clients' ability to evidence the quality of execution.

How will market operators work together?

Cooperation and coordination in a multimarket environment will be imperative to upholding the integrity of the market, particularly for minimising the impact of events like the 6 May 'flash crash' in the US, trading halts in response to the release of price sensitive information (which the ASX will retain responsibility for as part of its listing authority function), responding to external events (such as September 11) and in response to system outages.

We are proposing a market integrity rule requiring market operators to comply with a multimarket protocol with ASIC and other market operators. The types of issues the protocol will address are:

- the coordination of market operator controls (e.g. trading curbs and trade cancellations);
- arrangements for synchronised trading halts and suspensions; and
- arrangements for managing system outages on one or multiple exchange markets.

To ensure data is chronologically recorded, we propose market operators synchronise their clocks to a universal time clock.

How will ASIC supervise multiple exchange markets and how is it enhancing its surveillance capabilities?

Where there are multiple exchange markets, ASIC will conduct surveillance and monitor activity across all markets. ASIC's surveillance system is capable of supervising multiple markets, however, we propose enhancing our surveillance capabilities through:

- a review of what activity is considered misconduct in the prevailing environment;
- timely access to data, including real-time tagging of short sale transaction reporting and more granular information about clients; and
- increased capacity to the supervisory tools and systems.

Ideally, we would like to have real-time visibility of clients on all orders and trade reports to enable us to more quickly identify persons making trading decisions and to systematically detect misconduct by these persons, to more efficiently assess market trends and more quickly respond if an event like the 'flash crash' were to occur in Australia. We recognise this will take time and investment. However, there are a range of interim steps that would greatly enhance our surveillance capabilities and bring Australia more in line with arrangements overseas, while having substantially less impact on market participants (i.e. provision of information that market participants already routinely capture about their clients). We are consulting on these interim steps and will engage the industry on the longer-term goal of unique identifiers.

How will ASIC's additional surveillance costs be recovered?

CP 145 does not deal with proposals for a regime to recover ASIC's additional market supervision costs. The Government will consult separately on the costs that need to be recovered and the basis for their recovery.

What is the approval process for the proposed market integrity rules?

Market integrity rules are legislative instruments. ASIC will require Ministerial consent before making any rules and they are subject to Parliamentary disallowance. That is, a House of Parliament may disallow a market integrity rule within 15 sitting days after it is tabled in the House if a motion to disallow has been given and within the 15 days: a resolution to disallow is passed, the motion is not withdrawn or the motion is not acted upon.

When are responses to the consultation due and where should they be sent?

Responses are due 21 January 2011 and should be directed to:

Calissa Aldridge
Exchange Market Operators
email: marketstructure@asic.gov.au
Australian Securities and Investments Commission
GPO Box 9827
Sydney NSW 2001

Key concepts

Direct electronic access (DEA) refers to market access by persons that are not direct market participants of a market. This access may be either through the market participant's infrastructure or completely non-intermediated (i.e. unfiltered access).

Algorithmic trading is electronic trading activity whose parameters are determined by pre-determined rules aimed at delivering specific execution outcomes.

High-frequency trading is a subset of algorithmic trading and can be characterised as:

- the use of high-speed computer programs to generate, route and execute orders; and
- the generation of large numbers of orders, many of which are cancelled rapidly; and
- typically holding positions for very short time horizons and ending the day with a zero position.

Dark pools are electronically accessible pools of liquidity that are not pre-trade transparent (i.e. bids and offers are not displayed prior to being traded).